What Do SDA High School Students in Trinidad and Tobago Know About AIDS?

Acquired immunodeficiency syndrome (AIDS) among adolescents is an issue of international concern. A large number of young people are involved in risk-taking behaviors that may expose them to the virus.[1] According to a World Health Organization report, more than 50 percent of HIV infection worldwide occurs between the ages of 15 and 24 years.[2]

Teenagers are seen as more vulnerable to HIV infection than adults because of their tendency to engage in risky behaviors. Also, they tend to underestimate their vulnerability to disease and the severity of the effects of AIDS. Prevention efforts must first investigate adolescents' knowledge, beliefs, and attitudes about AIDS, since these frequently play an important role in motivating them to adopt protective behaviors.[3]

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There are many misconceptions about the ways AIDS is transmitted, especially among minorities.[4] An AIDS-related study conducted in Boston among foreign-born (mostly Caribbean and Latin-American) high school students revealed that they were more likely than their U.S. counterparts to hold misconceptions about how HIV is transmitted and to worry about getting AIDS, but less likely to talk about their risk-taking behaviors.[5] Results from a study among adolescents attending high school in San Francisco showed an increase in AIDS knowledge after a year of intensified AIDS education, but a decrease in adolescents' intention to use condoms. A better understanding of teenagers' attitudes may help to improve AIDS prevention efforts.[6]

There is little research addressing the problem of HIV/AIDS among adolescents in the Caribbean. Data collected in several Caribbean countries have confirmed an increase in AIDS[7] and suggest the importance of AIDS-related surveys among specific target groups.[8] This indicates an urgent need for appropriate strategies to prevent or contain the spread of AIDS.

BY NAOMI N. MODESTE, HELEN P. HOPP, AND IAN GREEN

To obtain more information about AIDS knowledge, beliefs, attitudes, and short-term behavioral intentions of adolescents ages 13 through 19 who attended SDA high schools in Trinidad and Tobago, we conducted a survey in 1993. The information should be useful to those who plan and implement health education programs for these schools and perhaps others throughout the church's system.

AIDS-related knowledge, attitudes, beliefs, and behavioral intentions among adolescents in the Caribbean has not been fully studied, and no survey had been done among teenagers attending SDA schools.

Method

Students enrolled in forms III, IV, and V (equivalent to the last three years of U.S. high school) in five SDA schools in Trinidad and Tobago were targeted for this study. Since there were only five schools, we decided to administer the questionnaire to all students in each selected classroom rather than to conduct a random sample. All 820 students in the targeted forms were included for participation. In order to maintain confidentiality and anonymity, no attempt was made to contact those absent from class on the day when the survey was conducted.

Students completing the questionnaires met in the auditorium of each school, without their teachers present. The five-part questionnaire used a four-point Likert scale (4=strongly agree/very sure to 1=strongly disagree/very unsure) to assess attitudes and beliefs about AIDS. Knowledge was measured by use of true/false statements. Demographic information included age, gender, form (grade), religious affiliation, and parental occupation.

Results

Eight-hundred-and-two students completed the anonymous questionnaire, for a response rate of 97.8 percent. The average age of respondents was 16.9 and the median age was 17. Of those responding, 60.2 percent were female and 39.8 percent were male. Of those indicating their educational level, 19.3 percent were in Form III, 40.6 percent in Form IV, and 40.1 percent in Form V.

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Beautiful Trinidad and Tobago, discovered by Sir Walter Raleigh in 1595. It was sugar and cacao that first made Trinidad and Tobago rich. Developed as separate plantation societies by various colonial powers until Britain united them in 1889, the islands retain distinct identities – Trinidad running at city pace, Tobago rural and relaxed.

More than half (54.8 percent) were Seventh-day Adventists, followed by other Protestants (20.9 percent), Catholics (18.5 percent) and other religions (5.8 percent). Less than half (37.6 percent) said that they had received instruction about AIDS in the classroom. Table 1 shows where respondents said they obtained most of their information about AIDS, ranked in order of decreasing frequency.

Of the 592 who completed the entire AIDS knowledge scale, 98 percent correctly answered at least half of the items, and 72.5 percent marked at least 12 out of 14 items correctly, indicating a high knowledge level in this population.

When asked about their attitudes toward AIDS and people with AIDS, most students responded positively. Females demonstrated more positive attitudes overall toward AIDS and people with AIDS than males. Unlike males, females in different grade levels did not differ significantly in their attitude toward AIDS. Males in the higher grade levels demonstrated more positive attitudes than those at lower levels.

Students were asked what they thought caused AIDS. On a scale that ranged from 1-27, with higher numbers indicating more correct beliefs about AIDS causation, respondents held moderately positive beliefs.

When asked about avoidance of risky sex behaviors, indicating that females were more confident that they would abstain from risky sexual behaviors and more likely to engage in protective behaviors. Females scored significantly higher (p=.001) on the intention scale than males.

Discussion

Even though students scored high on knowledge about HIV transmission, AIDS education is still needed in schools. Nearly two-thirds of the students had not received any instruction about AIDS in their school, and three-quarters said they wanted more AIDS education in the classroom. Parochial classrooms may not be receiving the benefit of AIDS education that governments plan and promote for public schools. Even though in general, the students' knowledge of HIV/AIDS was good, the fact that they obtained their information from the media indicates that they may develop distorted or inaccurate beliefs and attitudes.

When asked about their attitudes toward AIDS and people with AIDS, most students responded positively.

The students did hold some misconceptions about the ways HIV is transmitted. Twenty-six percent believed that AIDS could be caused by mosquito bites, and 29 percent believed that it could be contracted from toilet seats. These issues need to be addressed in SDA schools.

There were several gender differences in this study. Female students held a more positive overall attitude toward AIDS and people with AIDS than did males. Females were also more willing to endorse preventive or protective behaviors such as abstaining from sex within the next year, not having sex with several partners, and insisting that a condom be used. AIDS education efforts should certainly reinforce these views while encouraging males to change their attitudes and behaviors. Adventist teachers have a unique opportunity to combine factual information and moral principles as they provide health-related instruction.

More than half (54 percent) of the respondents felt that they were not at risk for getting AIDS. The most common reason given was that they were not sexually active. However, in an open-ended question, those who felt that they might be at risk of getting the disease stated reasons such as: "life is uncertain," "all are at risk," "it's the Lord's plague," "a dentist or doctor may make a mistake," "may get close to an AIDS patient," "may need blood transfusion," and "some modes of transmission are unknown." Clearly students who feel at risk for HIV hold various beliefs about why they are at risk.

Implications and Recommendations

The results of this study suggest the need for further research and perhaps a more comprehensive health curriculum in SDA schools.

Education can help to control the spread of AIDS. Concerted efforts should be directed at the adolescent pop-

TABLE 1

Adolescents' sources of information about AIDS (N=728)

Sources of information about AIDS	Percent
Television	91.2
Newspaper/magazine	77.1
Radio	65.0
Parents or other relatives	59.0
School friends	45.2
Church	39.7
Class lecture/discussion	26.6
Clubs (Pathfinders, Guides, Scouts)	14.4
Other	29.4

ulation. Since a high percentage of HIV infection occurs during the teen years, adolescents need to learn how to keep from becoming infected. Health topics, including AIDS education and prevention, can be taught separately or in existing subjects. A multi-intervention approach may be more appropriate than a single-subject approach to AIDS instruction. Educating students for healthy living should be considered an important part of the total education program. Schools have a great opportunity for disseminating AIDS information about encouraging abstinence before marriage and monogamy thereafter.

There may be some objection to certain sensitive topics in the health curriculum. However, sexuality education as a part of hygiene and anatomy and physiology should be appropriate and acceptable. This will provide an opportunity to teach the medical and social-behavioral aspects of HIV/AIDS and other sexually transmitted diseases.

With this in mind, we recommend the following:

• Appropriate AIDS information should be taught in SDA schools, and teachers should be trained to deal more effectively with this and other health issues. Parents and teachers can play a vital role in educating teenagers about the dangers of AIDS while helping them to form positive attitudes and practice appropriate behaviors.

• In-service programs for teachers should include awareness and consequences of AIDS, proper infection control procedures, appropriate support and referral networks, and how to deal with an HIV-positive student, as well as other health-related topics.

• Teachers and administrators should become knowledgeable about national AIDS education/prevention programs and select key elements that are appropriate for inclusion in the curriculum. Intervention should focus on areas that will produce the greatest impact in reducing the transmission of AIDS among teens.

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• Teen peer education can be an effective tool in teen health programs. Young people can be trained to interact in a sensitive and effective manner with other youth in their community, school, or church. They can be taught how to answer questions appropriately, develop assertive messages, and model appropriate behaviors. Such peer education should include the prevention of HIV/AIDS as well as ways to minimize the risks of contracting other sexually transmitted diseases. Training for peer education can also focus on wholesome out-of-school activities.

• Family-life education should begin in high school, particularly the upper grades, and should include decision-making skills, better interpersonal communication skills, pregnancy prevention, and appropriate behavior-modification activities.

• Teachers should learn about the living conditions and life-styles of students and their families, as well as the value systems that may affect their sexual and health behaviors. This will help them to determine the appropriate time to introduce various topics.

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