

A cross sectional survey of freshmen students at Texas Southern University, Houston, Texas, To measure their knowledge, behavior and perception of their vulnerability to HIV/AIDS

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ABSTRACT

Background: Human Immunodeficiency Virus (HIV) epidemic is spreading and what is a serious concern is that there is mounting evidence that the HIV that causes AIDS is spreading rapidly among teenagers worldwide. If this fast spread is to be halted, the knowledge, attitude and behavior of them should change.

Purpose: To understand Knowledge, Attitudes, and Practices (KAP) of minority youth

Methods: A sixty one point questionnaire, grouped into three main subscales was used to collect data from the target group of sixty-two freshmen students. It was designed to gather data about the students' knowledge, opinion, behavior about HIV/AIDS and their perception of their vulnerability to HIV infection.

Results: The respondents were very knowledgeable about the sources of HIV infection, its modes of transmission, sexual preferences that lead to infection, condom use, and the physiological manifestations of the disease

Conclusion: The students' lack of knowledge of the sexual behaviors of their friends, and their perception of invulnerability to the virus may be contributing to the increase in the prevalence of AIDS in the minority community.

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Introduction

As of December 1997, an estimated 30.6 million people worldwide-29.5 million adults and 1.1 million children younger than 15 years-were living with HIV/AIDS (1). An estimated 5.8 million new HIV infections occurred worldwide during 1997; that is approximately 16,000 infections occurred each day (1). In 1997 alone, HIV/AIDS associated illnesses cause deaths of approximately 2.3 million worldwide, including an estimate of 460,000 children younger than 15 years.

Worldwide, more that 75 percent of all adult HIV infections have resulted from heterosexual intercourse (2).

This evidence indicates the accelerating increased transmission of HIV. If it is to be halted, the knowledge, attitude and behavior of those in high risk of infection should change.

One necessary step would be to understand Knowledge, Attitudes, and Practices (KAP) of minority youth.

Material and Methods

The sample for this study was collected at Texas Southern University Department of Health and Kinesiology during the fall semester of 1997. A structured sampling technique was used to collect data from the target group of sixty-two freshmen students.(See figures 1,2,3) A representative group of students in various History and Principles of Health (H.Ed.233) Classes was selected for the study. The questionnaire used was used was a sixty one-point questionnaire, grouped into three main subscales. It was designed to gather data about the students' knowledge, opinion, behavior about HIV/AIDS and their perception of their vulnerability to HIV infection. There were seventeen (27.4%) males and forty-five (72.6%) females. There were fifty-seven (91.9%) Black, two (3.2%) Hispanic and three (4.8%) students of other ethnicities in the study. Broken down by age, there were twenty-six (42.0%) between the ages 17-20, fourteen (22.8%) between the ages 21-24, and two (3.2%) between the ages 29 and over.

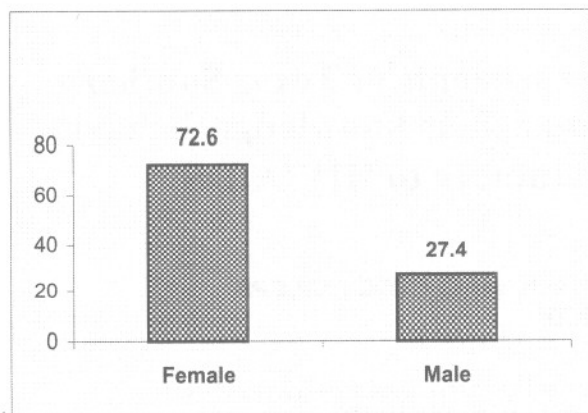


Figure 1. Respondents' Distribution by Sex

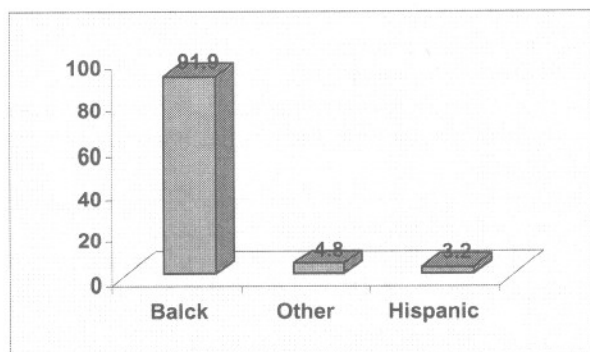


Figure 2. Respondents' Distribution by Race

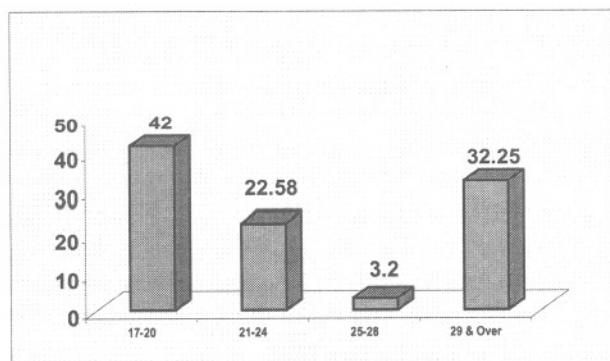


Figure 3. Respondents' Distribution by Age (by age intervals (years))

Results

The study showed that the respondents were very knowledgeable about the sources of HIV infection, its modes of transmission, sexual

preferences that lead to infection, condom use, and the physiological manifestations of the disease. However, they indicated that keeping in good physical condition is not related to whether or not they would get the HIV infection. Nine variables were used to measure the respondents' opinion about HIV/AIDS. Of the sixty-two respondents in the survey, thirty-nine (62.95%) strongly agreed that they were in control of whether or not they would get the virus, twenty (32.3%) strongly agreed that if they got AIDS, it was a matter of their own fate, twenty (32.3%) agreed that others play a big part in whether or not they would get AIDS. If it is meant to be that they would get AIDS, twenty-eight (45.2%) strongly disagreed. They also disagreed by twenty-eight (45.2%). On whether or not getting the virus depended on what their sexual partner wanted to do. Forty respondents overwhelmingly agreed (64.5%) that their own personal sexual behavior would determine whether or not they would get the virus. The students strongly disagreed by thirty-three (53.2%) on whether or not getting the virus is determined by other people. When asked if a wholesome diet and plenty of sleep would keep a person from becoming exposed to AIDS. The response was overwhelming, with fifty-nine (95.20%) responding "false" to this question. Of the sixty-two in the study, thirty-two (51.6%) had ever been tested for HIV. Of those tested for HIV, five (15.6%) preferred not to indicate the results of their tests while twenty-seven (84.4%) of those who tested for HIV indicated that they were negative for HIV. As to the respondents' perception of their vulnerability to HIV infection, thirty-nine (63.00%) indicated that they were not at a risk of HIV infection at all one (1.6%) indicated that he/she was slightly at risk. A total of twenty-one (34.0%) declined to respond to this question. The students were not sure of the sexual behavior of their friends. (Table 1,2,3)

Discussion

The students' lack of knowledge of the sexual behaviors of their friends, and their perception of invulnerability to the virus may be contributing to The increase in the prevalence of AIDS in the minority community.

This Study was limited to students at Texas Southern University, Houston, Texas, who

TABLE 1. Respondents' Opinion About HIV/AIDS

No.	How measured	Mode	Percent
1	I am in control of whether I get the HIV/AIDS virus	SA	62.9%
2	If I get the HIV/AIDS virus, it's a matter of fate	SD	32.3%
3	Other people play a big part in whether I get the AIDS virus	A	32.3%
4	If I take the right steps, I can avoid the HIV/AIDS virus	SA	32.3%
5	If it's meant to be, I will get the HIV/AIDS virus	SD	72.6%
6	More than anything else, chance determines whether or not I get the HIV/AIDS virus	SD	45.2%
7	Whether or not I get the HIV/AIDS virus depends	SD	38.7%
8	My own behavior determines whether I get the HIV/AIDS virus or not	SA	64.5%
9	Whether I get the HIV/AIDS virus is determined by other people	SD	53.2%

*Significant Scores SA = Strongly Agree SD= Strongly Disagree A=Agree

TABLE 2. Frequency distribution of respondents' knowledge of HIV/AIDS

Variable measured	Model Score	Percent
Most people who transmit the HIV/AIDS virus look unhealthy	False	88.75%
A Person can be exposed to the AIDS virus in one sexual contact	True	85.50%
Keeping in good physical condition is the best way to prevent the AIDS virus	False	87.10%
Condoms make sex completely safe	False	75.80%
Showering after sex greatly reduces the transmission of AIDS	False	95.20%
When people have only one sex partner they, no longer need to follow "safe sex" guidelines	False	91.80%
Most people who have been exposed to the AIDS virus quickly show symptoms of serious illness	False	90.20%
By reducing the number of different sexual partners you are effectively protected from AIDS	False	74.20%
The AIDS virus does not penetrate unbroken skin	False	54.80%
Pre-ejaculatory fluids carry the AIDS virus	True	79.00%
A person must have many different sexual partners to be at risk for AIDS	False	73.80%
People carrying the AIDS virus generally feel quite ill	False	85.50%
Withdrawal immediately before orgasm makes sex safe	False	95.20%
A wholesome diet and plenty of sleep will keep a person from becoming exposed to the AIDS virus		
It is more important to take precautions against AIDS in large cities than in small cities	False	77.40%
A negative result on the AIDS virus antibody test can occur even for people who carry the virus	True	65.60%
Most people exposed to the AIDS virus know they are exposed	False	80.60%

* Significant Scores

TABLE 3. Knowledge of Friends' Sexual Behavior

Variable measured	Modal Score	Percent
My friends always use condoms during sex	Neutral	40.30%
My friends talk about safer sex much more than they actually practice it	Neutral	35.50%
My friends believe that insisting on safer sex implies that you don't trust your partners	Disagree	67.70%
Safer sex is completely accepted by my friends	Agree	37.10%

enrolled in Health Education 233 History and principles of Health in the fall semester of 1997. The authors recommended that this study be extended to other students at the university and to other predominantly minority institutions in the nation for purpose of comparisons, generalization and universal applicability.

References:

- 1-UNAIDS: Report on Global HIV/AIDS Epidemic, December, 1997.
- 2-Guinn T. Global Burden of the HIV Pandemic. *Lancet* 1996; 348:99-106.