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 source 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.

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 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.
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

<table>
<thead>
<tr>
<th>No.</th>
<th>How measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am in control of whether I get the HIV/AIDS virus</td>
</tr>
<tr>
<td>2</td>
<td>If I get the HIV/AIDS virus, it’s a matter of fate</td>
</tr>
<tr>
<td>3</td>
<td>Other people play a big part in whether I get the AIDS virus</td>
</tr>
<tr>
<td>4</td>
<td>If I take the right steps, I can avoid the HIV/AIDS virus</td>
</tr>
<tr>
<td>5</td>
<td>If it’s meant to be, I will get the HIV/AIDS virus</td>
</tr>
<tr>
<td>6</td>
<td>More than anything else, chance determines whether or not I get the HIV/AIDS virus</td>
</tr>
<tr>
<td>7</td>
<td>Whether or not I get the HIV/AIDS virus depends</td>
</tr>
<tr>
<td>8</td>
<td>My own behavior determines whether I get the HIV/AIDS virus or not</td>
</tr>
<tr>
<td>9</td>
<td>Whether I get the HIV/AIDS virus is determined by other people</td>
</tr>
</tbody>
</table>

Mode | Percent  
--- | --------  
SA | 62.9%  
SD | 32.3%  
A  | 32.3%  
SD | 72.6%  
SD | 45.2%  
SD | 38.7%  
SA | 64.5%  
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 | False | 90.20%  
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 | Neutral | 35.50%  
More than they actually practice it | Neutral | 51.60%  
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%  

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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: