Attitudes and knowledge regarding Acquired Immune Deficiency Syndrome (AIDS) of 498 college students enrolled at California State University, Dominguez Hills were surveyed. The AIDS Opinion and Information Surveys were administered to subjects between the ages of 18 and 46+, with 81.5% being below the age of 32. The 19-item Opinion survey uses a five-point Likert-type response format to assess attitudes towards AIDS on four dimensions: (1) perceived personal vulnerability; (2) perceived severity of the AIDS epidemic; (3) desire for more information about AIDS; and (4) perceived effectiveness of prevention methods. The 23-item Information survey uses an extended true-false response format. Questions focus on transmission of the human immuno deficiency virus and prevention of infection. Subjects showed very conflicting feelings towards AIDS. Even though subjects perceived AIDS as a severe problem they did not feel personally vulnerable. Misconceptions about modes of transmission, especially from casual contact, were high. These findings suggest specific strategies for AIDS education on college campuses. (Author)
College Students’
Attitudes and Knowledge Regarding AIDS
Kathy Goggin
California State University, Dominguez Hills
Abstract

Attitudes and knowledge regarding AIDS of 498 students (45.9% males and 54.1% females) enrolled at California State University, Dominguez Hills were surveyed. The AIDS Opinion and Information Surveys (Rhodes and Wolitski, 1986) were administered to subjects between the ages of 18-46+, with 81.5% being below the age of 32. The 19-item Opinion survey utilizes a five-point Likert-type response format which assess attitudes towards AIDS on four dimensions: (1) perceived personal vulnerability, (2) perceived severity of the AIDS epidemic, (3) desire for more information about AIDS, and (4) perceived effectiveness of prevention methods. The 23-item Information survey utilizes an extended true-false response format. Questions focus on transmission of the Human Immunodeficiency Virus (HIV) and prevention of infection. Subjects showed very conflicting feelings towards AIDS. Even though subjects perceived AIDS as a severe problem they didn’t feel personally vulnerable. Misconceptions about modes of transmission, especially from casual contact, were high. These findings suggest specific strategies for AIDS education on college campuses.
As of April 11, 1988 the Centers for Disease Control report a total of 59,287 cases of AIDS in the United States. As the number of reported AIDS cases grows preventative measures become increasingly important. The best defense currently available to prevent the spread of AIDS is knowledge. Understanding the attitudes and level of knowledge about AIDS which a given population possesses provides a valuable framework upon which AIDS education programs can be developed. Considering that 68% of all cases of AIDS are people between the ages of 20-39 and that the incubation period is 2 to 7 years many people are becoming infected with the Human Immunodeficiency Virus (HIV) during their adolescent and college-age years (Centers for Disease Control, 1987; Strunin & Hingson, 1987). A review of published reports dealing with adolescents and AIDS suggests that high school students possess a low to moderate amount of AIDS knowledge (Strunin & Hingson, 1987; DiClemente, Zorn & Temoshok, 1986; Price, Desmond & Kukulka, 1985). Those students with the least knowledge were also those most likely to be engaging in high-risk behaviors (Strunin & Hingson, 1987).

A nation-wide survey of persons 18 years and over
found that while most subjects were aware of the ways in which the AIDS virus is most likely to be transmitted, they were particularly misinformed about the risk of casual contact (Dawson, Cynamon & Fitti; 1987). It was found that donating blood, working near someone with AIDS, sharing eating utensils, using public toilets and being bitten by mosquitoes or other insects were all possible modes of transmission.

Studies of college populations’ knowledge about AIDS are few, but a review of the literature did yield some interesting findings. A study of students at the University of Missouri concluded that while most subjects were aware of AIDS, this fact alone had not influenced their sexual behavior (Simkins & Eberhage, 1984). Other studies found that while students were relatively well informed about the major at-risk groups, modes of transmission, and methods of prevention, they, like adolescents, overemphasized the potential for casual and occupational transmission (Atkinson, Ktsanes and Hassig, 1987; Wolitski & Rhodes, 1987; Goodwin & Roscoe, 1988). Even though students perceived AIDS as a pervasive problem they did not tend to perceive themselves as being personally vulnerable (Wolitski & Rhodes, 1987).

This study will survey college students’ attitudes
and knowledge regarding AIDS to provide data upon which educational programs can be developed. It is predicted that traditional students (18-24 years of age) will perceive themselves as being at higher risk than non-traditional students (25-over). It is also felt that students will be in favor of more AIDS education. Lastly, it is felt that students, while having a relatively high level of knowledge, will have serious misconceptions regarding casual contact.

Method

Subjects

Five hundred and twelve students currently enrolled at California State University, Dominguez Hills were surveyed. Twelve subjects were excluded because they left five or more questions blank. Two subjects were excluded because they answered using two or less categories. A total of 498 subjects were included in the statistical analysis. Of these, 45.1% were males and 54.1% were females with .2% missing. Subjects' ages ranged from 18-46+, with 81.5% being below the age of 32 (see Table 1). Dominguez Hills is an unusual campus, in that 42.2% of the students are over the age of 29 (Blischke, 1982-1986). Because of this fact, the age categories were specially designed to fit our unique population. Freshmen represented 12.5% of the subjects,
College Students' 

with sophomores representing 12.9%, juniors 40%, seniors 21.7% and graduate students 12.9%.

Materials

The survey consisted of two instruments the AIDS Opinion and Information, Rhodes and Wolitski (1986). The 19-item Opinion Survey utilizes a five-point Likert-type response format which assess attitudes towards AIDS on four dimensions: (1) perceived personal vulnerability, (2) perceived severity of the AIDS epidemic, (3) desire for more information about AIDS, and (4) perceived effectiveness of prevention methods. The 23-item Information Survey utilizes an extended true-false response format. Questions focus on transmission of the Human Immunodeficiency Virus (HIV) and prevention of infection.

Design and Procedure

The survey was administered to subjects in their classrooms during the last three weeks of October. The 24 classes surveyed were randomly selected from an official listing of all open classes as of October 1st. From the listing of open classes it was determined that average class size was 55 students, because a sample of
500+ was desired, 21 classes were randomly selected. Classes with no official meeting time and lab sections of classes with the same population were excluded from all calculations. Because students often miss class and some might not wish to participate in the survey an additional five randomly selected class were chosen. Once classes were identified, proper campus approvals were obtained. Instructors were then contacted and asked if they would allow their classes to be surveyed. Prior to administering each survey, a short information sheet explaining how the survey would be used, how to record answers and subjects' option not to take the survey was read. Frequencies and crosstabs were produced.

Results

As predicted traditional students (18-24) perceived themselves as being at higher risk than non-traditional students (25-over), but not by the margin expected. Sixty percent of the traditional students were concerned that they might become exposed to HIV, while only 49.3% of the non-traditional students expressed the same concern. Traditional students also expressed more concern about getting AIDS (48.9%) than non-traditional students (34.5%). Traditional students tended to feel more helpless against AIDS than non-traditional
College Students' 
8 
students, 44.4% and 39.8% respectively.

Students also demonstrated very conflicting feelings towards AIDS. Even though over 96% felt that AIDS had become a major public-health crisis many students didn't feel personally vulnerable. While 89.4% felt they would be able to protect themselves from being exposed to AIDS, 83.5% were worried about getting the disease. Even more striking, while 89.4% felt they would be able to protect themselves from being exposed to HIV, 59% still felt helpless against the disease. 

--------------------------------------

Insert Table - about here

--------------------------------------

Students felt that it was very important for everybody to know the facts about AIDS (96.7%). Over 80% wanted to learn more about AIDS and how it is transmitted. Unfortunately, a majority of students (61.6%) didn't know where to go on campus for such information. Many students (54.4%) felt that AIDS information should be a part of the undergraduate curriculum.

The mean score on the information survey was 90.0, out of a possible 115 points or 79%, indicating that overall AIDS knowledge is relatively high on this campus. Even though the information mean was relatively
high, students, as predicted, were unsure of casual contact transmission. Over 67% believed or weren't sure if food prepared by a person with AIDS could spread the disease. Fifty-nine percent felt or weren't sure if children were likely to give AIDS to other children. Over 69% weren't sure or believed that kissing someone with AIDS is a good way to transmit the disease. And 73.9% believed or weren't sure if mosquitoes and other insects were able to transmit the virus. Students were also misinformed about blood donations and transfusions. Over 58% were extremely worried about blood transfusions. And 46% believed or weren't sure if you could get AIDS by donating blood.

----------------------------------

Insert Table 3 about here

----------------------------------

Discussion

As predicted, traditional students (18-24) perceived themselves as being at higher risk than non-traditional students (25-over). Considering the average age of AIDS patients this fact is not too surprising. But unfortunately, when people perceive themselves to be at high risk for contracting AIDS and don't understand how it can be transmitted they tend to deny rather than to change their behavior.
College Students' 

Even though the subjects who participated in this study were relatively well informed regarding transmission of HIV, they demonstrated serious misconceptions about casual contact transmission. As stated above, when people feel highly vulnerable, as is the case when they are misinformed about casual contact transmission, people tend to respond by denying rather than making behavioral changes. Those students who knew the least about casual contact transmission were also found to be those who feel the most personally vulnerable. Possibly with the proper education these feelings of personal vulnerability can be lessened.

Students also demonstrated a strong desire for more information about how AIDS is transmitted. It is encouraging that students themselves expressed a desire for information on the very same subject that they, as a group, knew least about. Students felt very strongly that everyone should know the facts about AIDS and a majority felt AIDS education should be integrated into the college curriculum.

This experiment corroborates the earlier studies which found that while most subjects were relatively well informed about how AIDS is transmitted they were particularly misinformed about the risk of casual contact transmission (Dawson et al., 1987; Atkinson et
The data provided by this study, and others like it, should be used to build a framework upon which AIDS education programs can be developed. To help students deal with AIDS, educational programs geared at addressing existing misconceptions and lessening individuals' inappropriate fears of the disease should be developed. If carefully designed, these programs can reduce inappropriate feelings of personally vulnerable which can lead to maladaptive behavior. Because of the difficulty of attracting the targeted populations it is recommended that existing groups (e.g., classes, clubs, fraternities or sororities) be used as forums for such programs.

Further research into this area should try to define teaching techniques that are both effective at informing and reassuring students.

As the projected epidemic of AIDS continues to escalate, increased attention must be directed at the college population, if in the long run we are to curtail the spread of AIDS.
References


Strunin, L., & Hingson, R. (1987). AIDS and adolescents: knowledge, beliefs, attitudes and

Table 1
Age Distribution

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>56.7%</td>
</tr>
<tr>
<td>25-31</td>
<td>24.7%</td>
</tr>
<tr>
<td>32-38</td>
<td>9.1%</td>
</tr>
<tr>
<td>39-45</td>
<td>6.8%</td>
</tr>
<tr>
<td>46-above</td>
<td>2.6%</td>
</tr>
<tr>
<td>.2% missing</td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Students' Conflicting Feelings Towards AIDS

<table>
<thead>
<tr>
<th>Item</th>
<th>% in agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS has become a major public health crisis.</td>
<td>96.2%</td>
</tr>
<tr>
<td>I think I will be able to protect myself from</td>
<td></td>
</tr>
<tr>
<td>being exposed to AIDS.</td>
<td>89.4%</td>
</tr>
<tr>
<td>I am worried about getting AIDS.</td>
<td>83.5%</td>
</tr>
<tr>
<td>I feel helpless against a disease like AIDS.</td>
<td>59.0%</td>
</tr>
<tr>
<td>I am concerned that I might become exposed to</td>
<td></td>
</tr>
<tr>
<td>the AIDS virus.</td>
<td>88.4%</td>
</tr>
</tbody>
</table>
### Table 3
Casual Contact Questions

<table>
<thead>
<tr>
<th>Item</th>
<th>% in agreement or not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosquitoes and other insects transmit HIV</td>
<td>73.9%</td>
</tr>
<tr>
<td>If you kiss someone with AIDS, you will get the disease</td>
<td>69.0%</td>
</tr>
<tr>
<td>Food prepared by a person with AIDS could spread the disease to others</td>
<td>67.7%</td>
</tr>
<tr>
<td>Children are likely to give AIDS to other children</td>
<td>59.5%</td>
</tr>
</tbody>
</table>