A study assessed the general knowledge of AIDS and its prevention among college students, and determined the source of that knowledge. A class of 17 senior-level journalism students used a focus group approach to select the most useful questions about AIDS and its prevention. The survey was administered by telephone to a random sample of 372 University of Hawaii students. Results indicated that students tended not to talk among themselves or with family members about AIDS and its prevention or consider the university faculty or classrooms significant sources of information. The students relied instead on the mass media—radio, television, newspapers, and pamphlets. Findings reinforce the need for continuing education campaigns on AIDS and its prevention for college-age youth. (Contains 14 references and 8 unnumbered tables of data.) (Author/RS)
Creating Message Strategies for an AIDS Campaign:
A Survey of the Basis of Student Awareness

by Tom Brislin
and Craig T. Miyamoto
Department of Journalism
University of Hawaii
Honolulu, HI 96822

Phone: (808) 956-6131
Fax: (808) 956-5396
E-mail: tbrislin@uhunix.uhcc.hawaii.edu

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A Survey of the Basis of Student Awareness

Abstract

This study formed the base for creating possible message strategies for a State Department of Health AIDS/Safe Sex campaign. It also reinforced the need for continuing education campaigns on AIDS and its prevention for college-age youth. Despite their generally higher levels of education and sophistication, this group still lacks significant information about specific AIDS and prevention topics such as HIV testing. This group is also frequently referred to as "the invincibles" because of its tendency, despite its knowledge, to perceive itself at a lower risk of, and to take fewer precautions against, AIDS and other STDs.

The study took on two tasks, using focus group, random-sample survey and content-analysis techniques:
* To assess the general knowledge of AIDS and its prevention among students at the University of Hawaii; and
* To determine the sources of that knowledge.

Significantly, the study results found students tend not to talk among themselves or with family members about AIDS and its prevention or consider the university faculty or classrooms significant sources of information, strengthening the call for a public education campaign through the mass media.

Several media and message strategies are discussed based on these findings.
Introduction

The TV spot shows an amorous couple clutching in embrace and seductively sinking to the ground in a Hawaii sugar cane field. The camera tilts up to show a man in hood and cape parting the cane stalks, announcing himself as "Condom Man" and lecturing the couple on safe sex.

Is it an effective message strategy to reach young people? The Hawaii State Department of Health produced it thinking that a humorous approach, with a recognized local comedian, would appeal to the target audience. But a college-age group watching it reacted with: "WHO has sex in a CANEFIELD?" "I'd NEVER do it there." "Ouch! It wouldn't be worth it."

The Health Department thought it had a winner with its series of "Condom Man" PSAs, but missed the mark with its message in thinking that the "plantation days" tradition of secretive sex in a canefield held any meaning for "Generation X" of the 1990s. Instead of reinforcing the importance of safe sex, the spot merely reminded its target audience of its preference for comfortable sex. Had the Health Department also missed the mark in choosing its medium? Is a television spot the best way to communicate its message to this particular audience?

The Health Department wanted to invest in a successful media campaign to reach the "invincibles" - young people who, although well-educated in the facts about AIDS and its prevention, still think it's something that won't affect them.
They think that BECAUSE they are knowledgeable about AIDS, they are beyond the need to defend against it.

The stumbling start led the Health Department to reevaluate its campaign to develop a more consumer- rather than production-, based message strategy: How does the target audience normally get its information about AIDS and its prevention, and how can we best get our message across those channels. HOW the audience gets its messages should determine how we shape them.

This study formed the base of developing possible new message strategies for the Health Department's AIDS and Prevention campaign.

Purpose and Design

The purpose of the study was twofold:

* To assess the general knowledge of AIDS and its prevention among students at the University of Hawaii; and

* To determine the sources of that knowledge.

Particular concern was focused on college-age youth because, despite their increasing levels of education and sophistication, they often consider themselves "invincibles" - personally unaffected or not at risk to the consequences, such as AIDS or STDs, of unprotected or dangerous activities.

As Eleanor Maricka-Tyndale reported in The Journal of Sex Research (1991) on the college-age group:

Interviewees generally did not perceive themselves as susceptible to infection with HIV, even when their personal sexual activities exposed them to a large degree of risk, and when they demonstrated knowledge of this risk in response to questions about HIV transmission.
But the reality is that one out of five Americans with AIDS was infected as a teenager (Strait 1991). According to the Centers for Disease Control, the total of AIDS cases reported among young adults 13-24 increased by 75 percent between 1989 and 1990. The U.S. General Accounting Office reports that although two-thirds of the nation's school districts required AIDS education at some time in grades 7-12, only 15 percent offered such curriculum in grades 11-12, despite the fact that sexual activity is known to increase markedly during this period (U.S. House Select Committee 1991a). By the time they reach the 12th grade, 70 percent of urban teens and 55 percent of rural teens have had intercourse (U.S. House Select Committee, 1991b).

About 90 percent of 12-25 year-olds know the primary causes of AIDS transmission, and 86 percent are aware that condoms can reduce the risk. Still, a majority had not changed their sexual practices and admit to having unprotected sex (U.S. House Select Committee 1991b) and many don't correlate casual sex with the risk of contracting HIV (McDermott et. al. 1987).

A continuing public education campaign is one strategy to repeat and reinforce the message of the potential danger of AIDS to this population and their need to be aware of the preventive measures available to them.

To conduct such a campaign, it is useful to know the primary sources students use to obtain knowledge about AIDS and its prevention so that the most effective message
strategies can be developed utilizing the most effective media for transmitting them.

This study approached the task in two ways:

* A small focus group discussed the most significant thing they recently learned about AIDS and its prevention, and the source from which they gained that knowledge. This group also reviewed several research questionnaires on AIDS and its prevention to help select the most useful questions - and those most relevant to a college-age population - for this study. Those questions comprised the second approach:

* A random-sample survey of University of Hawaii students (registered for the Fall 1992 and Spring 1993 semesters) that included questions on general AIDS awareness and on which sources of information students generally consulted about AIDS and its prevention. The survey also repeated the focus-group open-ended question on the most significant thing learned about AIDS and from what source it was learned.

**The Student - Media - AIDS Relationship**

This study charted sources, particularly mass media oriented, of specific information used by students. Recent studies by Brislin (1991) reporting media usage and habits of University of Hawaii students varied little from the general population: They regularly (3 or more times a week) read newspapers, particularly Ka Leo O Hawaii, the campus newspaper, and regularly (4 or more nights a week) watch TV news. The media use survey also discovered the reading and
viewing interests of the student population tracked those of the general population: local, national and international news. The students' interests were not restricted, as "conventional wisdom" might predict, to sports and entertainment news.

Awareness of information sources for specific knowledge as well as general media use are important in designing effective education campaigns.

A statewide survey in Georgia on Media Reliance and Knowledge About AIDS (1989) revealed that "multimedia" respondents (those who made use of both broadcast and print media) were better informed about AIDS than those who were either print-dominated or broadcast-dominated in their media usage. The survey further found some differences in the types of information print-dominated or broadcast-dominated respondents were more likely to know. Print dominated respondents had higher correct response rates for technical and medical types of questions while those who were broadcast-dominated did better on questions involving social dimensions.

Similar results were reported by Stroman and Seltzer (1989) who found those in a survey of Washington, D.C. residents who both read newspapers and watched TV news were better informed about AIDS than those who only watched TV news.

Sources other than the mass media are also effective in conducting AIDS education campaigns. Even though intravenous drug users were the specific audience for a combination
billboard/pamphlet clean needle campaign in Cleveland Ohio, Richard Perloff (1991) of Cleveland State University discovered the campaign created an increase in general public awareness of AIDS as a social problem.

**Methodology**

A class of 17 senior-level journalism students formed the focus group for this study. In three small groups of five, six and six, they were instructed to "discuss, select and record the three to five most significant things you have learned about AIDS and its prevention - and record the source you learned that information from." Each group was also told to select what they thought was the greatest area of continuing ignorance about AIDS and its prevention among college students.

Each small group reported its results to the group as a whole. The large group then analyzed results to determine the key sources of information from their own experience, and key items of knowledge and ignorance to include in a general student questionnaire. The group also reviewed and analyzed several existing research questionnaires from which questions relating to how students get and discuss information, and to the knowledge/ignorance items, could be taken or rewritten.

A first draft of the survey questionnaire was reviewed for initial revisions by the group, who had been given six hours of instruction in question design and wording, sampling and survey interviewing techniques. The group members pretested the second draft of the questionnaire on fellow
students. Difficulties in question wording, comprehension, question order and response categories discovered in the pre-testing were corrected for the final draft of the questionnaire form.

The questionnaire was then administered by telephone, between November, 1992 and March, 1993, to a random sample of 372 University of Hawaii students whose names and phone numbers were drawn by computer from the complete list of registered full- and part-time students at the University's Office of Admissions and Records. A random sample of this size carries a margin of error of 5 percent. Demographic distributions of the student sample (age, class standing, ethnicity, gender) reflected, within the margin of error, the same distributions in the total student population.

Responses to the final "open-ended" survey question were recorded on separate sheets by the survey interviewers for content analysis.

Results: Focus Group

The student focus group determined the major sources of information about AIDS and its prevention were:

- Television, separately including news stories, programs, commercials and MTV;
- Newspapers;
- A "celebrity case," such as Magic Johnson or Arthur Ashe;
- Friends;
- Doctors and other health professionals;
- Health pamphlets/brochures;
- Family members;
- Radio;
- Teachers;
- And classroom presentations.

The group also determined the greatest area of continued ignorance about AIDS and its prevention was in the area of HIV
testing: the advisability of getting tested before entering into an intimate relationship; where and how to go about getting tested; and that a single test is insufficient – one needs to be retested at least once after a six-month interval.

Questions about HIV testing and the major AIDS information sources became the core of the random-sample survey.

Results: Survey

Information Sources. The survey questionnaire first asked student respondents how frequently they got information about AIDS and its prevention from the 13 selected sources. Students were asked to respond "Most of the Time," "Some of the Time," "Very Little of the Time" or "None of the Time." The most popular sources of information, reflected by their percentage of responses as "Most of the Time" and by combining the "Most" and "Some of the Time" response categories were:

<table>
<thead>
<tr>
<th>Source</th>
<th>Responses: &quot;Most&quot;</th>
<th>&quot;Most&quot; + &quot;Some&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV News</td>
<td>50%</td>
<td>90%</td>
</tr>
<tr>
<td>Newspapers</td>
<td>47%</td>
<td>88%</td>
</tr>
<tr>
<td>TV Ads/PSAs</td>
<td>36%</td>
<td>81%</td>
</tr>
<tr>
<td>Pamphlets</td>
<td>33%</td>
<td>75%</td>
</tr>
<tr>
<td>TV Programs</td>
<td>31%</td>
<td>78%</td>
</tr>
<tr>
<td>Celebrity</td>
<td>20%</td>
<td>68%</td>
</tr>
</tbody>
</table>

The less popular sources of information, reflected by their percentage of "None of the Time" and by combining the "None" and "Very Little of the Time" responses were:

<table>
<thead>
<tr>
<th>Source</th>
<th>Responses: &quot;None&quot;</th>
<th>&quot;None&quot; + &quot;Little&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTV</td>
<td>49%</td>
<td>68%</td>
</tr>
<tr>
<td>Teachers</td>
<td>36%</td>
<td>61%</td>
</tr>
<tr>
<td>Classroom</td>
<td>34%</td>
<td>60%</td>
</tr>
<tr>
<td>Family Members</td>
<td>30%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Radio was the least cited of the mass media, but still
pulled in a 61 percent response in the combined "Most" (14 percent) and "Some of the Time" (47 percent) categories.

Interestingly, doctors and other health professionals, and friends hovered in the middle, with about half citing them as frequent sources and half as infrequent.

However, in the survey's following set of questions, doctors received a 93 percent response as a source students likely would use if they wanted additional information about AIDS and a 64 percent response as a source students who had recently sought additional information did use.

The second set of responses used the same information sources but turned on the question of whether students had recently sought additional information about AIDS and its prevention. Those who answered "yes" (13 percent) were asked if they used any of the sources listed. Those who said they had not sought additional information recently (85 percent) were asked if they wanted to get such information, would they be likely to use any of the sources.

In addition to doctors and other health professionals, students who wished to find out additional information said they were likely to turn to:

- Health pamphlet/brochure 90%
- Newspaper 74%
- TV news 72%
- TV program 62%
- TV Ad/PSA 57%

Hovering in the middle range were Friends (51%); a Celebrity Spokesperson, such as Magic Johnson (48%); Family member (46%) and Radio (46%).
The least likely sources students seeking more information would turn to were:

- MTV 19%
- Teachers 29%
- Classroom presentation 37%

In discussing the results, student interviewers reported many respondents interpreted a "Celebrity spokesperson" in this set of questions to include anyone infected with HIV or AIDS they might have talked to or heard speak. As a later question showed 30 percent of the total respondents said they personally know someone who has tested HIV-positive, this is a reasonable assumption.

It is interesting to note that those who had sought information recently about AIDS and its prevention indeed turned to Health pamphlets (72 percent), Doctors (64 percent) and Newspapers (60 percent) as their top three choices. After that, however, their responses diverged from the would-be seekers. The only other source garnering more than half "yes" responses for this group was Friends (60 percent). Fewer than a third said they had gotten the information they sought from a TV program (30 percent), TV Ad/PSA (32 percent), a known person or Celebrity AIDS case (32 percent), or a Family member (28 percent). As in previous responses, teachers, classroom presentations and MTV were not used with any significant frequency.

Attitude/Knowledge/Risk Assessment. The next set of questionnaire items dealt with general attitude statements about personal knowledge and risk assessment about AIDS and
its spread, interspersed with items about HIV testing. In this set respondents were asked to Strongly Disagree, Disagree, Agree or Strongly Agree with the statements. For ease of reporting, the categories have been collapsed into Agree and Disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know a lot about AIDS.</td>
<td>84%</td>
<td>16%</td>
</tr>
<tr>
<td>I have a low risk of getting AIDS.</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>I am frightened by spread of AIDS in the US.</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>I am frightened by spread of AIDS in Hawaii.</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>There is too much concern about risk of AIDS.</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>I do not think much about AIDS.</td>
<td>24%</td>
<td>76%</td>
</tr>
<tr>
<td>I am personally concerned about chances of getting AIDS.</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>I take a great deal of precaution to protect myself.</td>
<td>86%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Students were also asked to characterize how they thought their friends might answer these general statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>We discuss AIDS and ways to prevent it.</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>AIDS cure will probably be developed soon.</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>AIDS vaccine will probably be developed soon.</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>AIDS will eventually be brought under control.</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>Changed sexual behavior because of fear of AIDS</td>
<td>64%</td>
<td>34%</td>
</tr>
<tr>
<td>(2 percent refused to answer)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Worthy of particular note is that this sample of students was fairly evenly split over being personally concerned about chances of getting AIDS and one out of four didn’t think much about AIDS at all. Many of the students - again, about half - don’t discuss AIDS and its prevention with friends. There is also an expression of misplaced optimism, typical among youth, that the problem will be solved for them in the form of a vaccine or some other scientific development that will bring AIDS under control and away from their lives. Although most students say they personally take precautions, one out of three in this sample thinks their group of friends has not
markedly changed sexual behavior despite a fairly well-founded knowledge of AIDS risks. These combined findings tend to support the "invincibles" image of college-age youth.

**HIV Testing.** The set of statements on HIV testing yielded the following results:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>People should get tested for HIV infection before they have sex in the future. (2 percent refused)</td>
<td>74%</td>
<td>24%</td>
</tr>
<tr>
<td>I am aware of where a person can go to get tested for HIV.</td>
<td>76%</td>
<td>23%</td>
</tr>
<tr>
<td>A test for HIV infection must be repeated in six months.</td>
<td>71%</td>
<td>28%</td>
</tr>
<tr>
<td>(My group of friends thinks) it's a good idea to get a test for HIV infection before starting an intimate relationship.</td>
<td>82%</td>
<td>17%</td>
</tr>
<tr>
<td>(My group of friends thinks) if you're worried about having come in contact with someone infected, you should get tested.</td>
<td>89%</td>
<td>10%</td>
</tr>
<tr>
<td>I know someone who has had an HIV test.</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>I know someone who has tested HIV positive.</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>I have been tested for HIV virus. (4 percent refused or gave no answer)</td>
<td>23%</td>
<td>73%</td>
</tr>
</tbody>
</table>

These results support the student focus group's contention that information about HIV testing has yet to reach all students. One out of four don't see the need for testing before entering into an intimate relationship, where to go to get testing, or that a single test is insufficient in determining the presence of the HIV virus.

Cross-tabulations and statistical tests of means showed further that those students in the sample who admitted to a poor knowledge base about AIDS and its prevention are more likely to think of themselves as being at-risk, more likely to think there's too much concern about AIDS, less likely to see
the need for HIV testing, less likely to know how to go about getting tested and less likely to talk with friends about AIDS - a potentially key source of obtaining information about HIV testing.

**Significant Knowledge/Source.** The open-ended concluding question asked the student respondents the most significant thing they've learned regarding AIDS or its prevention, and the source of the information.

A content analysis of the responses grouped them into nine theme clusters:

<table>
<thead>
<tr>
<th>Theme</th>
<th>(# of responses)</th>
<th>Sample Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>(93)</td>
<td>&quot;Exchanged through bodily fluids.&quot;</td>
</tr>
<tr>
<td>Prevention</td>
<td>(77)</td>
<td>&quot;Importance of Abstinence&quot;</td>
</tr>
<tr>
<td>Fear/Doom/Widespread</td>
<td>(51)</td>
<td>&quot;You can’t escape AIDS.&quot;</td>
</tr>
<tr>
<td>Social Behavior</td>
<td>(29)</td>
<td>&quot;Heterosexuals at greater risk than they think.&quot;</td>
</tr>
<tr>
<td>General Knowledge</td>
<td>(20)</td>
<td>&quot;Everything is significant.&quot;</td>
</tr>
<tr>
<td>Rate of Spread</td>
<td>(18)</td>
<td>&quot;AIDS spreading fast all over.&quot;</td>
</tr>
<tr>
<td>Medical Facts</td>
<td>(16)</td>
<td>&quot;Can test positive but not have full-blown AIDS&quot;</td>
</tr>
<tr>
<td>Emotional Toll/Personal Experience</td>
<td>(14)</td>
<td>&quot;How this lady looked who had AIDS - her hair was falling out.&quot;</td>
</tr>
<tr>
<td>Religious</td>
<td>(5)</td>
<td>&quot;Punishment for gay lifestyle.&quot;</td>
</tr>
</tbody>
</table>

The sources cited for this knowledge generally tracked the earlier responses with print and broadcast media being the most prominent. Many of the responses from the top two clusters, however, cited a high school or university class as a source of knowledge.

**Demographics.** Other questions in the survey measured the demographics in the sample. Distributions of age, class standing, ethnicity and gender in the sample population fell within the margin of error for the same distributions within the total University of Hawaii student population.

There were no significant variations in responses
throughout the survey by age, class standing, gender or ethnicity.

Discussion and Recommendations

This study reinforces the need for a continuing education campaign for college-age youth - a group frequently referred to as "the invincibles" because of its tendency, despite its knowledge, to perceive itself at a lower rise of - and to take fewer precautions against - AIDS and other STDs.

Despite their generally higher levels of education and sophistication, the University of Hawaii group, at least, still lacks significant information about specific AIDS and prevention topics (such as HIV testing).

Significantly, they tend not to talk among themselves or with family members about AIDS and its prevention. Neither do they consider university faculty or classrooms as significant sources of information. They rely instead on the mass media - radio, television, newspapers, and printed materials such as pamphlets.

Consequently, any program that aspires to influence their behavior must include use of the mass media to stimulate a pivotal action on their part. Only then would the students be motivated to seek more private diagnoses and sources of information.

A logical approach to the problem may include:

Problem Identification: "College students who are uninformed (or misinformed) about AIDS/HIV are the very ones who don't see the need to be concerned."
Audiences and Desired Behavioral Objectives:

(1) Primary - College students who lack AIDS/HIV knowledge. Message: "You need to be informed before making decisions that can affect your life." Objective: Participate in at least one AIDS/HIV educational activity.

(2) Secondary (intervening) - Peers, college students who make (or have made) a concerned effort to learn about AIDS/HIV. Message: "Some of your friends are endangering their lives, but only because they are uninformed about the consequences." Objective: Persuade at least one member of the primary group to participate in at least one AIDS/HIV educational activity.

(3) Secondary (intervening) - University faculty. Message: "Some of your students are endangering their lives, but only because they are uninformed about the consequences." Objective: Devote more class time to discussions on AIDS/HIV and how it applies to the subject being taught.

Strategy and Communications Tactics: The basic strategy would use mass media (identified by the primary audience as the primary source of information on AIDS/HIV) in its various forms.

An effective campaign would target the primary audience via mass media, and on a one-to-one basis via the two secondary audiences. Peers and friends would be reached by mass media; faculty would be reached via targeted communications (e.g., memoranda, flyers, meetings).

One-way mass communications, specifically advertising,
are the traditional modes of publicizing public health campaigns.

In its most recent incarnation, the AIDS/HIV campaign of the Centers for Disease Control uses advertising and public service announcements primarily to stimulate awareness of the problem - proactive public information. The campaign launched on January 4, 1994 is relying on partnerships and collaboration with municipalities and other interested "partners" with a stake in the health problem (Jackson 1994).

In addition to the standard health pamphlets, news releases and public service announcements, a successful campaign would utilize an extensive media relations program involving specialized writers/reporters in entertainment, health, science, travel, housing and legislative government. The campus press should be strongly included in media relations. Student journalists might be given guidance on how to handle breaking news about AIDS prevention; they might be encouraged to pursue feature stories and conduct further analysis. An effort directly targeting campus press might include conducting workshops for student journalists, providing necessary background information, documentation, and human resources to use in stories on AIDS and its prevention.

Keeping in mind that students (at least in the University of Hawaii sample) do not associate AIDS information with friends, teachers, family members, or MTV-style entertainment, it may be counterproductive to script public service announcements based on "talk-story" sessions among friends,
classroom settings, family discussions, or MTV-style music or rap videos. On the other hand, it may be productive to utilize such scenarios as doctors' offices or a testing center; mock TV-newscasts or newspaper headlines; or featuring actual people who are HIV positive, or have developed AIDS, speaking directly and frankly to students. Humor should be used cautiously and sparingly.

The video announcements should also be made available to teachers for use in the classroom as a springboard for discussion on particular aspects of AIDS education, such as HIV testing.

The campaign progress and its outcomes should be evaluated extensively.

NOTE

1 The findings in this sample generally tracked those in a smaller sample (N=94) in a study by Naito (1991) at California State-Long Beach, with the exception of Friends (71 percent Long Beach vs 51 percent Hawaii). Naito included several information sources not in the Hawaii study, including the campus health center (37 percent) and AIDS workshops/seminars (28 percent).
References


