

THE RELATIONSHIP OF MANDATED HIV/AIDS EDUCATION
IN OKLAHOMA PUBLIC SCHOOLS TO KNOWLEDGE,
ATTITUDES, AND BEHAVIORS OF
IN-STATE COLLEGE FRESHMEN

By

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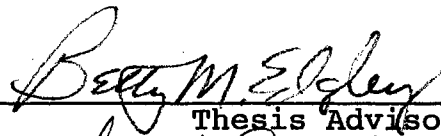
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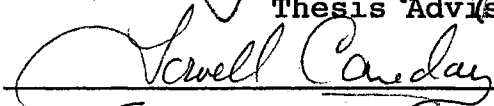
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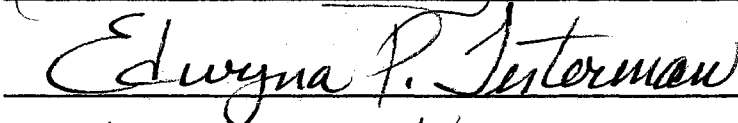
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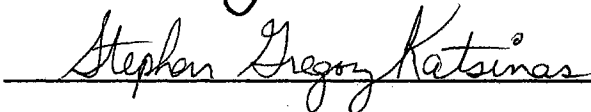
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CHAPTER I

INTRODUCTION

In February of 1981, the United States Public Health Officials noted that pentamidine, a rarely prescribed drug, was being dispensed at an alarmingly significant rate (Heyward & Curran, 1988). The Centers for Disease Control, Atlanta, Georgia, through the Food and Drug Administration, had pentamidine licensed as a strictly controlled... "investigational new drug" (Shilts, 1987, p. 54). At the same time, the epidemiology surveillance system... "the world's foremost medical detective agency" within the Centers for Disease Control was investigating aberrant reports of two very rare and uncommon diseases, pneumocystis carinii pneumonia and Kaposi's sarcoma (Francis & Chin, 1987, p. 1358).

June, 1981, the Centers for Disease Control, disturbed by epidemiological reports, conferred with specialists in the fields of immunology, venereology, virology, cancer epidemiology, toxicology, parasitology, and sociology and founded the Kaposi and Opportunistic Infections Task Force. Their charge was to vigorously investigate a... "mysterious immune epidemic" (Shilts, 1987, p. 71). By January of 1982, Copenhagen, Paris, Belgium, Zaire, and Uganda were

confirming widespread cases of pneumocystis carinii pneumonia and Kaposi's sarcoma. The acronym for this mysterious immune disease was internationally agreed to be AIDS, Acquired Immune Deficiency Syndrome (Kolbe, 1989).

Officials from the Centers for Disease Control in 1983, had identified the syndrome in homosexual men, in intravenous drug users, in hemophiliacs, in children with HIV infected mothers, and in the nation's blood supply. In 1984, Dr. Francoise Barre of the Pasteur Institute in Paris, France and Robert C. Gallo of the National Cancer Institute in the United States isolated the Human Immunodeficiency Virus (HIV) that causes AIDS (Shilts, 1987). Three hundred and sixteen people had AIDS in 1981 and by 1984, when the virus that caused AIDS was isolated, over five thousand people in the United States were diagnosed with the disease (Centers for Disease Control [CDC], 1990).

In 1985, HIV/AIDS was no longer a distant threat to middle America. Politically stigmatized social pariahs were no longer the sole owner of HIV/AIDS (Shilts, 1987). Infected school children and prominent figures of the entertainment industry were being diagnosed as HIV infected. This awakened a sleeping media. By 1986, approximately twelve thousand Americans had AIDS. In 1987, the ninth leading cause of death among those fifteen to twenty-four years old was AIDS (U.S. Department of Health and Human Services [DHHS], 1990).

Motivated by the increasing numbers of HIV/AIDS cases, State Representative Vicki White-Rankin of Norman, Oklahoma

placed before the 1986 Oklahoma Legislature a bill to mandate Comprehensive Health Education in Oklahoma Public Schools grades one through twelve. Representative White-Rankin, a former public school teacher and counselor, expressed to the House floor her concern for Oklahoma's adolescents and her belief that the school is one of the best mediums of information to prevent the spread of the disease (Vicki White-Rankin, Child Advocate, personal communication, June 8, 1992). White-Rankin's bill was finalized as House Bill 1476, an act..."mandating AIDS prevention education for students; providing procedure and requirements for such education; providing for codification, providing an operative date; and declaring an emergency" (AIDS Prevention Education Act [H.B. 1476], 1987). The passage of this act, operative July of 1987, was the first AIDS education mandate among the nation's fifty states. The Oklahoma State Health Department in cooperation with the Oklahoma State Department of Education were responsible for implementing HIV/AIDS prevention education to Oklahoma Public Schools in the Fall semester of 1987 (Deborah Courtney, Curriculum Coordinator, State Education Agency, personal communication, June 10, 1992).

Concomitantly, in 1987, the Centers for Disease Control set in motion a national effort to empower the nation's public schools and State Education Agencies to provide effective HIV/AIDS education as a means to prevent the spread of the Human Immunodeficiency Virus that causes the

disease AIDS (Moore et al., 1991). For the first time since the inception of the Centers for Disease Control as a national public health institute, monies were provided, in the form of non-competitive grants, to each of the nation's fifty State Education Agencies. Prior to 1987, funding for public health education had been channeled solely to State Health Departments and their local/county health agencies. Oklahoma received a one million dollar, five year non-competitive grant from the Centers for Disease Control ... "providing (1) immediate education for youth in junior high and high school about behaviors that increase the risk of HIV infection and (2) such education within a more comprehensive program of school health education that establishes a foundation for understanding relationships between personal behaviors and health" (Oklahoma State Department of Education [OSDE], 1988a), to begin fiscal year of January, 1988 concluding fiscal year of January, 1992. The grant was entitled the "Cooperative Agreement to Support School Health Education to Prevent the Spread of Human Immunodeficiency Virus".

In 1988, the Centers for Disease Control established the Division of Adolescent and School Health to serve... "four functions: first, to identify the most significant health risk among youth; second, to monitor the incidence and prevalence of those risks; third, to implement and sustain broad national programs to prevent those risks; and fourth, to iteratively evaluate and improve the impact of

these risk prevention programs" (Kolbe, 1990, p. 44). The Oklahoma State Department of Education hired a coordinator to oversee the coordination of the "Cooperative Agreement to Support School Health Education to Prevent the Spread of the Human Immunodeficiency Virus" grant in October of 1988 (Dan Reich, Director, Comprehensive Health Section, State Education Agency, personal communication, June 22, 1992). By the winter of 1988, the Centers for Disease Control initiated a process to identify and periodically monitor important health behavior among youths. The Youth Risk Behavior Surveillance System was established by the United States Centers for Disease Control (Kolbe, 1990).

In 1988, the Oklahoma State Department of Education in cooperation with the Centers for Disease Control, the Division of Adolescent and School Health participated in the Youth Risk Behavior Surveillance System, surveying over two thousand high school students in grades nine through twelve to establish baseline data regarding HIV/AIDS knowledge, attitudes, and behaviors (CDC, 1990). In 1989, the Oklahoma State Department of Education, under the umbrella of the Centers for Disease Control, secured a contractual agreement with Oklahoma State University to continue the Youth Risk Behavior Surveillance System among Oklahoma's high school students in grades nine through twelve. Data has been collected by the Centers for Disease Control from forty states and local education agencies since 1988 to the present to establish baseline data addressing at-risk health

behaviors of adolescents. Oklahoma ceased participating in this process after the 1989-90 school term (Jacque Reynolds, HIV/AIDS Coordinator, State Education Agency, personal communication, June 15, 1992).

At present, there is no vaccine and no medical cure for HIV/AIDS. The only certain method of decreasing the expansion of AIDS is to prevent infection with the Human Immunodeficiency Virus. People need clear and accurate information on HIV/AIDS and support in changing behaviors which increase the probability of HIV infection. Knowledge of both the modes of transmission and functional methods of prevention is the primary mechanism against the spread of HIV/AIDS.

In 1987, House Bill 1476 mandated Oklahoma's 611 school districts to present instruction about HIV/AIDS prevention to students at least once during grades seven through nine; and, once during grades ten through twelve. House Bill 1476 left the responsibility of developing programs, designing materials, updating teacher training, and implementing curriculums to the autonomy of each individual school district and respective school board. Funding from the "Cooperative Agreement to Support School Health Education to Prevent the Spread of HIV," went directly to eight school districts out of the 611 in the state, for the purpose of establishing HIV/AIDS prevention education within a comprehensive school health education curriculum. These eight school districts were selected based on their high

teen pregnancy rates and high rates of adolescents diagnosed with sexually transmitted diseases. The 603 remaining districts received indirect services of the grant by way of training and materials developed through the State Department of Education which were provided to districts on a voluntary basis (Jacque Reynolds, HIV/AIDS Coordinator, State Education Agency, personal communication, June 15, 1992).

Significance of the Study

The first cases of AIDS were reported in the United States in 1981. This mysterious immune disease has become an epidemic unprecedented in modern history (Kolbe, 1989). Due to the fact that the Human Immunodeficiency Virus that causes AIDS is transmitted, for all practical purposes, exclusively by behavior that individuals can change, educational programs designed to influence such connected behavior can be effective in preventing the spread of HIV/AIDS. In 1988, there were 75,845 cases of AIDS with 15,900 of those cases consisting of individuals between the ages of 20-29 years old (DHHS, 1990).

In 1992, there were approximately 216,000 cases of AIDS with one out of every five cases occurring among those who were 20-29 years old. Ten years is the average incubation period between HIV infection and the onset of AIDS. Logically, health officials have realized that some proportion of those 20-29 year olds diagnosed with AIDS were

infected as teenagers (Kolbe, 1990). In 1991, HIV infection culminating in AIDS was the sixth leading cause of death among young people 15-24 years old (Kann et al., 1991). Teenagers in the United States suffer significant social problems that annually result in 800,000 unintended pregnancies and two and a half million cases of sexually transmitted diseases (Troy, 1990). Surveillance data can be used to determine both the need for public health action and to re-evaluate health education programs.

Oklahoma's public schools have the capacity and responsibility to help assure that young people understand the nature of the AIDS epidemic and the specific actions they can take to prevent HIV infection (CDC, 1990). Presently, adolescents and young adults are a primary risk group for contracting the virus that causes AIDS. Fifty percent of all teenagers are sexually active with the majority having had more than one sexual partner, before completing high school (CDC, 1990). Young people's lives are clearly at risk. According to the National Association of State Boards of Education, the American Federation of Teachers, the National PTA, the National School Board Association, and the American Association of School Administrators, public schools must assume an instrumental role in giving youths the information they need to avoid contracting this deadly virus (Appendix G).

The fundamental purpose of AIDS education is to prevent HIV infection. The content of HIV/AIDS education should be

developed to address the broad range of behavior exhibited by young people. Education programs should guarantee that young people acquire the knowledge and functional skills they need to adopt a lifestyle that virtually eliminates their risk of becoming HIV infected (Chesney, 1987). The impact of this study could result in a quest to re-evaluate the criteria for developing the context, content, methodology, implementation, and preparatory for teaching HIV/AIDS prevention education as mandated via House Bill 1476.

Statement of the Problem

This study investigated the knowledge, attitudes, and behaviors regarding HIV/AIDS of incoming in-state college freshmen who attended Oklahoma's public schools since 1987 and were 1992 high school graduates of the same system. These 1992 in-state college freshmen were the first students in Oklahoma to receive the benefits of HIV/AIDS education mandated by the 1986-87 legislation that was originally initiated by State Representative Vicki White-Rankin of Norman, Oklahoma, via House Bill 1476. Further, these same students were second semester eighth graders in 1988, when the Oklahoma State Department of Education received the Centers for Disease Control, Division of Adolescent and School Health's non-competitive grant to support school health education to prevent the spread of HIV, thereby,

receiving the full impact of these two historical health programs.

Purpose of the Study

The Human Immunodeficiency Virus is transmitted almost exclusively by behavior that individuals can modify. Educational programs to influence relevant behavior can be effective in preventing the spread of HIV/AIDS. The purpose of this study was to determine the relationship of mandated HIV/AIDS education in Oklahoma's Public Schools to knowledge, attitudes, and behaviors of in-state college freshmen via House Bill 1476 and the "Cooperative Agreement to Support School Health Education to Prevent the Spread of HIV" grant funded and mandated in Oklahoma's Public School Systems the Fall of 1987.

Hypotheses

The following null hypotheses were tested at the 0.01 level of significance:

Hypothesis #1

There is no statistically significant correlation between self reported time on task in HIV/AIDS prevention education and knowledge gain among all respondents.

Hypothesis #2

There is no statistically significant correlation between methods of instruction and HIV/AIDS knowledge,

and attitudes among sexually active respondents.

Hypothesis #3

There is no statistically significant correlation between HIV/AIDS knowledge and health behaviors among sexually active respondents.

Hypothesis #4

There is no statistically significant correlation between knowledge of HIV/AIDS and attitudes among all respondents.

Assumptions

This study was based on the following underlying assumptions.

1. The subjects who received the instrument carefully read and properly follow the directions of the instrument.
2. The subjects responded truthfully to the knowledge, attitudes, and behavior survey.
3. The testing environment was conducive to accurate testing.
4. The subjects knowledge regarding HIV/AIDS was varied.
5. Subjects were responding from their secondary based knowledge and experience.

6. Due to the extremely fragmented and abrupt nature in which Oklahoma public schools implemented the emergency HIV/AIDS mandate in 1987-88 school term (H.B. 1476), subjects will be cognizant of their seventh through twelfth grade HIV/AIDS prevention education experience.

Delimitations

The study was delimited as follows:

1. Subjects were limited to male and female 1992 high school graduates who attended Oklahoma Public Schools in the same district from 1987 to 1992.
2. Subjects were limited to in-state college freshmen who were attending state supported institutions of higher learning the Fall of 1992.
3. The study was limited to the 1992-93 school term.

Limitations

The following limitations may influence the results of this study.

1. Subjects were Fall, 1992 traditional in-state college freshmen attending state supported institutions of higher learning eliminating a true random sampling of all 1992 Oklahoma high school graduates.
2. Subjects were not representative of specific risk groups.

3. The subjects exposure to additional health education, other than the mandated HIV/AIDS education implemented in Oklahoma Public Schools in 1987 via H.B. 1476, could affect their responses to the instrument.

Definitions of Terms

The following definitions provide the reader with an understanding of the terms utilized throughout this study.

Acquired Immune Deficiency Syndrome (AIDS). A life-threatening disease that damages the immune system of an otherwise healthy person.

Centers for Disease Control (CDC). One of three major agencies that comprises the United States Public Health Service. The Centers for Disease Control is composed of different centers that handle various public health problems. The largest is the Centers of Infectious Disease under which HIV/AIDS research is handled.

Cooperative Agreement to Support School Health Education to Prevent the Spread of HIV. A federal non-competitive grant allocating one million dollars in the fiscal year of January, 1988 to fiscal year January, 1992 to the Oklahoma State Department of Education.

Division of Adolescent and Social Health (DASH). A division within the Centers for Disease Control and whose purpose is

to identify the most significant health risks among youth; monitor incidence and prevalence of those risks; to implement and sustain broad national programs to prevent those risks and to iteratively evaluate and improve the impact of those risk prevention programs.

Food and Drug Administration (FDA). One of the three major agencies that comprise the U.S. Public Health Service. The FDA is primarily responsible for the safety of food and pharmaceutical products.

House Bill Number 1476 (H.B. 1476). A 1987 emergency act enacted by the Oklahoma State Legislature to mandate HIV/AIDS prevention education to public school students a minimum of once during the period from 7-9 grade; and, a minimum of once during the period from grade 10-12.

Human Immunodeficiency Virus (HIV). The virus that causes the disease Acquired Immune Deficiency Syndrome.

Kaposi's Sarcoma (KS). A rare vascular skin cancer characteristic of the disease AIDS.

Kaposi Sarcoma Opportunistic Infection (KSOI). The name of the first task force established by CDC to investigate the mysterious immune disease, renamed the AIDS Program.

Local Education Agency (LEA). The individual school districts making up the public school system of Oklahoma.

Morbidity and Mortality Weekly Report (MMWR). A supplement from the CDC published by the Epidemiological Program Office.

National Cancer Institute (NCI). One of the two major institutes within the National Institute of Health.

National Institute of Health (NIH). One of the three major agencies that comprise the U.S. Public Health Service.

Pneumocystis Carinii Pneumonia (PCP). A rare and deadly form of pneumonia seen in individuals with severely compromised immune systems characteristic of AIDS patients.

State Education Agency (SEA). The Oklahoma State Department of Education is the State Education Agency within Oklahoma.

State Supported Institute of Higher Learning. These encompass Research II, Comprehensive, and Two-Year institutions.

Traditional In-State College Freshmen. A 1992 high school graduate of Oklahoma's Public School System who was born on or after January 1, 1972.

U.S. Public Health Service (PHS). A health and scientific research agency under the direction of the Assistant Secretary of Health of the Department of Health and Human Services. The U.S. Public Health Service is comprised of three agencies, the NIH, CDC, and FDA.

Youth Risk Behavior Surveillance System (YRBSS). A questionnaire designed in cooperation with all fifty states including Guam, American Samoa, the Virgin Islands, and Puerto Rico through the Division of Adolescent and School Health, Centers for Disease Control to assess the need for public health action and to implement education intervention.

CHAPTER II

REVIEW OF LITERATURE

The severity of the HIV/AIDS pandemic concomitantly united with the elusiveness of a remedial treatment, a cure, or a preventative vaccine, has led to a primary governmental HIV prevention policy, which is the commission to educate America's youth to avoid specific high risk behaviors (Popham, 1989). In 1988, the Centers for Disease Control established the Division of Adolescent and School Health. One selected function was to establish a systematic procedure to obtain baseline data and thereafter annually obtain data that would describe current levels of HIV/AIDS-related knowledge, attitudes, and behavior among adolescents. The data would be used for the planning, evaluation, and improvement of HIV/AIDS program efforts (OSDE, 1988a). HIV/AIDS education programs may be well intended, but unless the goals are realized through appropriate assessment criteria, the effectiveness remains in question.

The following literature review discusses three topics related to the illumination of research relative to effective planning, evaluation, and improvement of educational programs, the effacement of biases against

HIV-carriers, and the modification of individual conduct culminating in the avoidance of HIV infection. These three topics are: 1) HIV/AIDS-related knowledge, 2) HIV/AIDS-related attitudes, and 3) HIV/AIDS-related behaviors.

HIV/AIDS-Related Knowledge

Webster's defines knowledge as an ... "acquaintance with facts, truths, or principles as from study or investigation; familiarity gained by sight, experience, or report; state of being cognizant or aware of as a fact or circumstance". HIV/AIDS-related knowledge, according to research leaders in this field, has been measured by responses to HIV/AIDS true and false statements from a survey designed by the Division of Adolescent and School Health, the Centers for Disease Control (Anderson et. al., 1991; DiClemente, Zorn, & Temoshok, 1986; Kolbe, 1990; Strunin & Hingson, 1987). This self administered questionnaire, referred to and used throughout the literature, was formulated by representatives from all fifty State Departments of Education, the District of Columbia, Puerto Rico, American Samoa, Guam, the Virgin Islands, and sixteen U.S. cities with a high cumulative incidence of HIV/AIDS (Kann et al., 1991). Since 1988, these twenty one questions have been modified, expanded, and utilized with students in public schools grade five through twelve, with graduate and undergraduate, college and university students, with gay and bisexual male adolescents, with multiethnic adolescents, with teen runaways and

incarcerated juveniles, and with gender specific groups (Brown, Nassau & Barone, 1990; Carroll, 1991; DiClemente, Boyer & Mills, 1987a; Dusenbury, Botvin, Baker & Laurence, 1991; Kann et al., 1991; Rotheram-Borus & Koopman, 1991; Sly, Eberstein, Quadagno & Kistner, 1992).

HIV/AIDS-related knowledge among college and university students both rural and urban show a sophisticated understanding of HIV/AIDS and the modes of transmission. College students consistently show that they know HIV is a behaviorally transmitted virus and that the risk of contraction can be decreased by adopting safer sexual practices and behaviors (Walters, 1992). However, these students are considerably less aware that casual contact is not a route of transmission. With this high level of knowledge, there appears to be similarly high levels of misconceptions relating to HIV/AIDS transmission via casual contact (Katzman, Mulholland & Sutherland, 1988). Analysis suggests that these are two conceptually distinct domains of information and accurate information about transmission does not necessarily dispel misconceptions about casual contact (DiClemente et al., 1987a).

Ajdukovic and Ajdukovic (1991) found overall knowledge of HIV/AIDS by college students was moderately high, but that there was a significant difference in the amount of functional or self protection knowledge. Students possessed satisfactory knowledge about the means of transmitting HIV/AIDS and what practices reduce the risk of exposure to

the disease, but they knew little about HIV/AIDS symptoms and the extent of the HIV/AIDS pandemic (Ajdukovic & Ajdukovic, 1991). Regarding self protection knowledge, Gray and Saracino (1989) concur with Ajdukovic that college students clearly understand modes of HIV/AIDS transmission but lack specific information regarding condom use and the Centers for Disease Control's consumer recommendations regarding condoms.

Further, findings show a positive relationship exists between the willingness to associate with HIV-carriers and the level of an individuals HIV/AIDS knowledge. For example, in Krupka and Vener's (1988) study, only 25% of low knowledge respondents were willing to share the same swimming pool with HIV-carriers. Yet, 51% of the high knowledge respondents were willing. Respondents, regardless of knowledge levels, were extremely reluctant to date HIV infected individuals.

The high levels of knowledge do suggest that college students are well informed about HIV/AIDS transmission, but they do not accept that the risk of infection applies to them (Thurman & Franklin, 1990). Intellectually, college students reflect that AIDS is fatal, yet they continue to feel that practicing safer sex is ..."too much trouble" (Manning, Barenberg, Galtese, & Rice, 1989). Students are not changing their sexual practices because of their HIV/AIDS related knowledge. Fifty percent of respondents in

college do not perceive themselves at risk for HIV/AIDS infection (Adame, Nicholson, Wang & Abbas, 1991).

Overall, the survey results of college students indicate that students possess a high level of comprehension regarding modes of HIV/AIDS transmission but are deficient in acknowledging the nil relationship between casual contact and HIV infection. Furthermore, students' cognizance of self protection information was lacking. Finally, college students did exhibit considerable epidemiological knowledge of HIV/AIDS but did not perceive themselves at risk, believing they are less likely than most people to acquire HIV/AIDS (Adame et al., 1991).

HIV/AIDS-related knowledge among high school students both nationally and within states indicates that the majority of high school students do understand the major modes of transmission, but incorrectly believe donating blood and insect bites increase their chances of HIV infection. A substantial minority believe that birth control pills provide some protection against HIV infection and that it is possible to tell whether a person is infected by ... "looking at them" (Anderson et al., 1990). These misconceptions may actually put students at risk contrary to the misconceptions identified among the college populous.

High school students generally demonstrated a high level of correct information on HIV/AIDS transmission by way of sexual intercourse, the sharing of needles with infected users, blood transfusion transmission, and the understanding

that a pregnant woman could infect the fetus (McGill, Smith, & Johnson, 1989). However, high school students demonstrated a lower knowledge about methods of prevention or self protection, as well as, misinformation about situations that pose little or no threat of infection (Skurnick et al., 1991). Additionally, only 15% of sexually active adolescents, with high levels of knowledge, reported changing their sexual practices to avoid contraction of HIV/AIDS (Ross, Caudle & Taylor, 1991; Strunin & Hingson, 1987).

Ross, Caudle and Taylor's (1991) study indicates that students with significantly lower HIV/AIDS knowledge scores were in rural areas with parents in the lower socioeconomic stratum. They found a positive correlation between the acquisition of HIV/AIDS knowledge and the amount of time on task. Further, Ross, Caudle and Taylor (1991) found knowledge about HIV/AIDS was unrelated to behavioral change when modifications addressing situational determinants of behavior and HIV/AIDS-related social skills were absent.

Although, HIV/AIDS education is increasing in schools, such education is still not offered to all students in all secondary schools. The quality of instruction is also unknown (Anderson et al., 1990). The results of school based sample studies can only be generalized to adolescent populations still in school because dropout rates increase in high school and these students are excluded from most studies (Kann et al., 1991). As the HIV/AIDS pandemic has

progressed, high risk groups such as adolescent gays, bisexuals, and intravenous drug users have modified their behavior. However, there is less evidence of behavioral change among more typical adolescents as it relates to the acquisition of HIV/AIDS knowledge (Ross et al., 1991).

HIV/AIDS-related knowledge among first through sixth graders in public schools reveals that awareness of HIV/AIDS increases as the students' age and grade level increase (Brown et al., 1990a; Sly et al., 1992). Students at this level are relatively well informed about disease outcomes but uninformed about HIV/AIDS symptoms, etiology, and prognosis which is relatively comparable to college and high school students (Sly et al., 1992). Elementary age children possess a number of misconceptions about modes of transmission but measures from scores indicate there is some transmission-specific knowledge being learned (Brown et al., 1990a). Studies further indicate that this age group has difficulty generalizing and transferring concepts (e.g. differentiating between blood transfusion and donating blood or no fear of infection by way of tears but a fear of infection by way of a sneeze). Children also indicated a belief that HIV/AIDS could be transmitted by inanimate objects and their pets (Sly et al., 1992).

Students in different grade levels are not expected to be equally knowledgeable in grade-specific academic areas such as spelling or arithmetic, just as they should not be expected as first graders to be as cognizant of HIV/AIDS

transmission as sixth graders. Additionally, children under eleven years old have difficulty generalizing or transferring information from more publicized modes of contraction to less publicized modes of contraction. Finally, elementary students often are confused as they attempt to assimilate information because they are frequently receiving conflicting information from a variety of sources including school, parents, friends, and the media (Brown et al., 1990a).

HIV/AIDS-related knowledge among adolescent gay males who are at risk of becoming infected with HIV shows a moderately high general knowledge of HIV/AIDS transmission (Rotheram-Borus & Koopman, 1991a). Homosexual and bisexual contact is linked to 38% of all HIV/AIDS cases among adolescent males (DHHS, 1990). Although, gay youths are at considerable risk for HIV infection, very few studies exist. The Rotheram-Borus study, conducted in 1990, indicates these youths have a moderately high general knowledge of HIV/AIDS; however, research studies done with gay males show there is a negative relationship between high knowledge and safer sex practices much like the research outcomes found among heterosexual males and females (Rotheram-Borus & Koopman, 1991a).

HIV/AIDS-related knowledge in regard to runaway and incarcerated youths indicates that these adolescents are well aware of disease progression, groups at risk, and transmission by sexual contact between uninfected and

infected partners. However, these adolescents were less able to identify situations that pose no risk of transmission. These adolescents' knowledge about transmission was too often not connected to risk reduction practices (Skurnick et. al., 1991). Further, these youths were not consistent in their knowledge as to the consequence or outcome of HIV infection (Rotheram-Borus & Koopman, 1991b). Finally, HIV/AIDS-related knowledge was not found to be significantly related to the ages of these clients. According to Koopman, this suggests that HIV/AIDS-related knowledge is not acquired automatically with age, but instead requires specific instruction (Koopman et al., 1990).

HIV/AIDS-related knowledge associated with ethnicity and gender produces specific differences in HIV/AIDS comprehension. Females appear to be more knowledgeable regarding the prevalence of HIV/AIDS, the mode of transmission and symptomology than male adolescents. Females were less likely to hold common misbeliefs about HIV/AIDS (Carroll, 1991). Additionally, females scored significantly higher on specific knowledge items as compared to males such as knowledge regarding a cure for AIDS, ways one cannot acquire HIV, and clarity on casual contact transmission (Dusenbury et al., 1991). The fact that adolescents and children are being exposed to HIV/AIDS education in what appears to be a fragmented fashion allows for gender insensitive dissemination of information,

thereby, attributing to the differences in gender specific knowledge about HIV/AIDS (Sly et al., 1992).

A sociodemographic study was conducted by DiClemente, Boyer and Mills (1987a) specifically targeting Euro-Americans (19%), African Americans (17%), Asian Americans (49%), and Spanish Americans (11%). Euro-Americans scored highest on the knowledge component about HIV/AIDS in comparison to African Americans, Asian Americans, and Spanish Americans. However, African Americans were significantly higher in the knowledge component of the survey than the Asian Americans and Spanish Americans. Asian Americans scored lower than Spanish Americans in regards to knowledge about HIV/AIDS (DiClemente et al., 1987a). These findings demonstrate an uneven degree of knowledge about HIV/AIDS among varying ethnic groups indicating the need for gender sensitive and ethnicity sensitive teaching modules.

Knowledge of HIV/AIDS among elementary, secondary, and post-secondary students shows varying levels of HIV/AIDS-related knowledge with all three groups scoring in the high to moderately high quartile. Risk of infection by these three groups is unilaterally perceived as low with functional or self protection knowledge minimal. Further, these three groups are relatively uninformed about HIV/AIDS symptoms, etiology, and prognosis. Gay adolescent males also show moderately high levels of HIV/AIDS-related knowledge but low levels of safer sex practices comparable

to their high school and college heterosexual counterparts. Runaways and incarcerated youths have an understanding of HIV/AIDS transmission, but are less able to identify situations that pose no risk of infection. These youths were not consistent in their knowledge as to the outcome and consequences of this disease. HIV/AIDS-related knowledge associated with gender and ethnicity reveals significant differences and demonstrates the imperative need for teaching modules both age-appropriate and sensitive to gender, ethnicity, and sexual orientation.

HIV/AIDS-Related Attitudes

The American College Dictionary defines attitudes as ..."a position, disposition, or manner with regard to a person or thing; emotion". HIV/AIDS-related attitudes, according to a variety of researchers, has been equally measured by using true and false statements or attitudinal like scales that measures degrees of agreement and disagreement with HIV/AIDS-related attitude statements (DiClemente et al., 1986; Kann et al., 1991; Krupka & Vener, 1988). These self administering instruments used throughout the literature were formulated, modified, and expanded from a basic survey of HIV/AIDS-related attitudes developed by the Division of Adolescent and School Health, the Centers for Disease Control (Kann et al., 1991). Attempts to measure HIV/AIDS-related attitudes have been initiated with drug rehabilitation counselors, elementary and secondary

students, college and university undergraduates, and gender specific groups. The term HIV/AIDS-related attitudes as represented in the literature encompasses a broad spectrum as a definition. The term refers to attitudes or fears regarding contamination, homophobia, distrust of governmental policies and policy makers, suspicion of the scientific community, xenophobia, and a belief in the obliteration of the civil rights for HIV-carriers (Anderson et al., 1988; Baldwin & Baldwin, 1988; Biasco & Taylor, 1991; Brown et al., 1990; Burnette, Redmon & Poling, 1990; Crawford, 1990; DiClemente, Forrest & Mickler, 1990; Dusenbury et al., 1991; Krupka and Vener, 1988; Mejta, Denton, Krems & Hiatt, 1988; Skurnick et al., 1991; Sly et al., 1992; Strunin & Hingson, 1987).

HIV/AIDS-related attitudes among college and university students indicates that HIV/AIDS is perceived as a more serious threat to their health than Cancer (Adame et al., 1991). These students are developmentally at a stage in their lives where dating and sexual intimacy frequently occurs and this ties to stigmatization of HIV-carriers. This attitude is strongly reflected in a study of 1175 randomly selected college students in which 90% of the respondents were unwilling to date such a person or share a dorm room with such a person (Krupka & Vener, 1988). The majority of students surveyed were not willing to use the same bathroom with an HIV-carrier, but 50% of these respondents were willing to have persons with HIV/AIDS

..."in my neighborhood" (Biasco & Taylor, 1991).

DiClemente, Forrest, and Mickler (1990) and Crawford (1990) reported that approximately 60% of their respondents would feel fearful if a classmate contracted the disease and continued to attend classes.

In assessing participants acceptance or non-acceptance of homosexual behavior, 45% identified themselves as unaccepting of sexual minorities. More males reported intolerance toward homosexuals than females (Goodwin & Roscoe, 1988). Royse, Dhooper and Hatch (1987) found in their study that older respondents were less accepting of diverse lifestyles than younger respondents. Females were more likely to indicate a willingness to work with HIV/AIDS patients, regardless of orientation, than their male counterparts (Burnette et al., 1990).

Burnette, Redmon, and Poling (1990) divided their sample into five groups based on one statement: "AIDS is God's punishment for immorality." Respondents who strongly agreed overestimated the numbers of HIV/AIDS cases in the United States, and viewed Central Africa and African Americans as the group most infectious and infected. These respondents advocated the quarantining of HIV-carriers, and also conveyed a belief that the government is conspiring to hide the real truth about HIV/AIDS from the public (Burnette et al., 1990). Those in the sample who strongly disagreed with the above statement reflected opposite philosophies.

Whose rights shall prevail? Students feel that privacy of HIV-carriers should not be maintained if others are at risk. Seventy percent of respondents in a study by Biasco and Taylor (1991) believed a physician should tell a spouse if a patient tested HIV positive. Overall, findings show that students tend to be more in favor of individual rights than public health goals (Biasco and Taylor, 1991). The most unflagging response to policy was the belief that HIV-carriers who continue to have unprotected sexual intercourse, should be incarcerated. Students viewed this as tantamount to murder (Krupka & Vener, 1988). In reference to employment, the majority of students believed HIV-carriers should not be discriminated against with the exception of military personnel (Biasco & Taylor, 1991).

A substantial majority of respondents believe that health care professionals and food handlers should be screened for HIV/AIDS. A small majority, 15%, in Krupka and Vener's (1988) study, advocate the quarantining of HIV-carriers. However, the greater majority, in Adujovic and Adujovic's (1991) study, advocate an egalitarian health policy that opposes any type of quarantining. Many respondents revealed a distrust of official pronouncements and felt the need to challenge so called reputable scientist whom too often promulgate ambivalent messages (Krupka & Vener, 1988).

Ajdukovic & Ajdukovic (1991), Biasco & Taylor (1991) and Krupka & Vener (1988) found that there was a positive

correlation between high levels of knowledge and open-mindedness about HIV/AIDS carriers. Respondents with high levels of knowledge were less phobic, more tolerant, and more humanistically empathetic towards HIV-carriers. In short, it appears that college students with moderate to high levels of knowledge about HIV/AIDS, are generally more attitudinally enlightened.

HIV/AIDS-related attitudes among high school students bears some similarities with college students. Most students consider HIV/AIDS to be a serious disease in which considerable fear is expressed. Over half in DiClemente's 1986 study expressed a preference for acquiring any other disease than HIV/AIDS. Skurnik et al. (1991) reported in his study that 83% affirmed fears of getting HIV/AIDS and his findings were supported by DiClemente, Zorn and Temoshok (1986) and McGill, Smith and Johnson (1989) in which 78% of DiClemente's respondents reported ... "being afraid of getting AIDS," and 87% of McGill's respondents concurred.

Belief that HIV/AIDS can be spread by living and working with someone with HIV/AIDS is significantly correlated with the fear of attending school with, living with, and working with someone HIV infected (Skurnik et al., 1991). Kann et al. (1991) reports in a national survey that 91% of high school students believe they cannot be infected by being in the same classroom with a student who has HIV/AIDS. However, only 50% of these same respondents believe an HIV-carrier should be allowed to attend school.

A majority of high school students in Skurnik's 1991 study responded that HIV/AIDS cannot be contracted from toilet seats; yet these same students expressed a fear of sharing the bathroom with an HIV-carrier (Skurnik et al., 1991).

As with college respondents, high school students who achieved high levels of knowledge were attitudinally more tolerant than those with low levels of HIV/AIDS knowledge (DiClemente et al., 1990). Ethnically, there were no significant differences between groups in terms of attitudes regarding casual contagion (Dusenbury et al., 1991). Pervasively, respondents agreed conclusively that it was extremely important for students to receive HIV/AIDS prevention instruction in their school curriculum (DiClemente et al., 1987a; Kann et al., 1991; McGill, Smith & Johnson, 1989; Skurnik et al., 1991).

HIV/AIDS-related attitudes among elementary aged respondents indicate that these young children were less likely to blame gays for the HIV/AIDS crisis than their adolescent counterparts. Yet, these children were more apprehensive about touching someone with HIV/AIDS than adolescents (Brown et al., 1990a). Regarding race and gender, little variation in attitudes was found among elementary age children (Sly et al., 1992). Interestingly, first graders were more likely to be willing to be friends with someone who has HIV/AIDS than fifth graders or high school students; however, these same first graders were more likely to want to see HIV-carriers isolated than the fifth

grade respondents (Sly et al., 1992). Brown, Nassau and Barone (1990) conclude that young children seem to have an awareness of the disease but are uninformed as to how one cannot acquire HIV/AIDS.

HIV/AIDS-related attitudes among substance abuse counselors were surveyed to explore self-reported attitudes associated with HIV/AIDS. It was found that substance abuse counselors did not have the same biased beliefs about clients with HIV/AIDS as does the general public. The majority of substance abuse counselors did not view HIV/AIDS as a punishment for behavior. The counselors did not view HIV-carriers as immoral or deserving of their condition. Additionally, counselors believed insurance companies should not discriminate against these clients, and that society as a whole needed to be more responsive to the needs of people with HIV/AIDS (Mejta et al., 1988).

Counselors, however, were divided in their beliefs that HIV/AIDS was a natural consequence of drug abuse and homosexuality. These respondents believed that at-risk groups such as substance abusers should be screened for HIV. The counselors felt HIV/AIDS clients should be treated apart and placed in separate facilities from uninfected clients. Only 9% of the counselors thought at-risk clients could easily alter high risk behavior (Mejta et al., 1988).

HIV/AIDS-related attitudes among drug rehabilitation counselors, elementary and secondary students, college and university undergraduates, and gender specific groups reveal

similar yet diverse attitudinal levels. Common attitudes include the perception of HIV/AIDS as a serious threat to one's health, that HIV/AIDS prevention education is an essential component to educational curriculums, and that if a choice could be made any disease other than HIV/AIDS would be preferable. First graders and drug rehabilitation counselors were more embracing of people with HIV/AIDS. Counselors, first graders, and college females were most tolerant of sexual minorities. College students, high school students, and elementary aged children conveyed attitudinal misconceptions about casual contagion. Elementary children, college students, high school students, and counselors expressed varying degrees regarding isolation of HIV-carriers. Diversity was expressed by college respondents who pervasively distrusted policy makers, and by counselors who questioned the discrimination against HIV-carriers by insurance companies. In conclusion, enlightened attitudes toward HIV-carriers was positively correlated with high levels of knowledge (Brown et al., 1990a; DiClemente et al., 1990; DiClemente et al., 1986; Dusenbury et al., 1991; Kann et al., 1991; McGill et al., 1989; Skurnik et al., 1991, Sly et al., 1992; and Strunin & Hingson, 1987).

HIV/AIDS-Related Behavior

The Webster New World Thesaurus lists the following synonyms for behavior ... "conduct, actions, morals,

practice, and manners." According to HIV/AIDS researchers the term behavior has been defined in the context of condom use, intravenous drug abuse, precocious sexual intercourse, intercourse associated with mind altering substances, non-monogamous intercourse, coital frequency, bisexual experiences, and/or a combination of one or all of the above (Anderson et al., 1990; Baldwin & Baldwin, 1988; Carroll, 1988; DiClemente et al., 1987a; Flax, 1989; Gray & Saracino, 1989; Harold, Fullard & Devlin, 1990; Kann et al., 1990; Katzman et al., 1988; McGill et al., 1989; Thurman & Franklin, 1990). Trials conducted to measure sexual risk behaviors of adolescents and young adults have been implemented in population samples that represent college and university students, high school students, gay and bisexual male youths, and teen runaways. The instrument used to measure these behaviors was developed from a survey that was designed by the Division of Adolescent and School Health, the Centers for Disease Control, in an attempt to identify HIV/AIDS risk behavior. Adolescents ninth through twelfth grade, like adults become infected with HIV predominantly through sexual intimacies and/or intravenous drug use (Kann et al., 1991).

Since 1981, with the revelation of the HIV/AIDS epidemic, the National Survey of Family Growth and Cycle III, the Planned Parenthood Poll and the National Survey of Adolescent Males attempted to measure HIV/AIDS-related sexual behaviors among adolescents and young adults. These

surveys were limited, in that, they were administered to households and seniors in high schools. The questionnaires, since 1981, utilized by the HIV/AIDS researchers, as reported in the literature, have been based on the Secondary School Health Risk Survey (SSHRS) that measures the prevalence of sexual intercourse and illegal drug injection among high school students grades nine through twelve (Kolbe, 1990).

HIV/AIDS-related behaviors among college and university students demonstrate a preponderance of risk behaviors related to potential HIV/AIDS contagion. Samples ranging from 195 (Carrol, 1990) to 1059 (DiClemente et al., 1990) reveal that approximately 84% of the respondents report being sexually active (Baldwin & Baldwin, 1988; Burnette et al., 1990; Crawford, 1990; Sly et al., 1992; Strunin & Hingson, 1987; Thurman & Franklin, 1990; Walters, 1992). An exception was a study done by McGill et al. (1989) in which their sample population was made up of Catholic higher education students. They reported that only 49% of the respondents reported being sexually active and 51% reported no coital experience.

Two studies surveyed the frequency or experience with anal intercourse. McGill et al. (1989) reported that 14% of the female respondents had engaged in anal intercourse. DiClemente's 1990 study of 1059 students found 4.2% of the male and female respondents had engaged in anal intercourse.

Precocious intercourse was addressed in Baldwin and Baldwin's 1988 study in which four respondents revealed first intercourse at or before the age of eleven years old. However, 63% of the 798 respondents reported first intercourse between the ages of sixteen to eighteen years old. Baldwin and Baldwin (1988) specifically asked about coital status by gender and found that 27% of the female respondents reported no coital experience and 15% of the male respondents reported virginal status.

Studies requesting self reported data on sexually transmitted disease diagnosis found that between 7% to 19% of the sexually active participants had indicated a diagnosis of sexually transmitted disease other than HIV (Burnette et al., 1990 Gray & Saracino, 1989). Further, McGill et al. (1989) asked if sexually active participants had ever engaged in anonymous sexual intercourse, 8% of their sample responded in the positive. Crawford (1990) looked specifically at ethnicity and found African Americans were no more or less sexually active than Euro-Americans.

Regarding condom use among sexually active participants, alarmingly, 53.8% report never using or infrequent use of condoms (Carroll, 1991; Crawford, 1990; DiClemente et al., 1990; McGill et al., 1989; Strunin & Hingson, 1987; Thurman & Franklin, 1990). Among the Catholic students, 58% reported never using or infrequent use of condoms (McGill et al., 1989). Studies of African

Americans indicated more use of condoms as compared to Euro-Americans (Crawford, 1990).

Non-monogamous or multiple partner coitus was disclosed by respondents dating twelve months prior to replying to the survey. McGill et al. (1989) found 31% of their sample reported having engaged in sexual intercourse with two or more partners in the past twelve months. DiClemente et al. (1990) reported that 43% of sexually active respondents had two or more partners in the past twelve months with 9% reporting four or more partners in the same time frame. Stevenson and Stevenson's (1990) study showed that 41% reported two or more partners in the twelve month time frame with 22% of these respondents reporting they had sexual intercourse with six or more partners in the prior twelve months dating back from the time the survey was administered.

HIV/AIDS-related sexual behaviors among high school students parallels the behavior reported among college/university respondents. However, the study among college students did not address HIV infection via the injection of illegal drugs. High school surveys requested this information from their participants. Respondents reported in a national survey done by the Centers for Disease Control that 3% had engaged in illegal intravenous drug abuse. This percentage extrapolates nationwide into approximately 345,100 students of which 102,200 are in grade nine through twelve (Kann et al., 1991). Strunin and

Hingson (1987) conducted a study of 963 high school students and found that 13% reported using drugs other than alcohol with 1% reporting the use of intravenous drugs. Strunin and Hingson's (1987) study reflected the same percentages found in the national survey conducted by the Division of Adolescent and School Health, the Centers for Disease Control in 1989. A non-random study conducted by Departments of Education in 1988 and conducted in conjunction with the Division of Adolescent and School Health showed 2-5% reported use of intravenous drugs (CDC, 1990).

Sex risk behaviors were studied by Strunin and Hingson(1987) and McGill et al. (1989). Strunin and Hingson's (1987) sample indicated that 56% of the respondents were sexually active with 48% of the high school participants either never or seldom use condoms. Further, the same sexually active respondents indicated that 43% of the time condoms were not used because they were not immediately available. Twenty eight percent reported being embarrassed to purchase condoms, and 34% chose not to use condoms because they interfered with pleasure.

A national survey was administered involving over 9000 high school students, selected from a four stage cluster of all private and public school institutions, grade nine through twelve, representing the United States, the District of Columbia, Puerto Rico, and the Virgin Islands (Anderson et al., 1990; Kann et al., 1991). In this study, 59% of the

high school students reported being sexually active. Forty percent of the sexually active respondents had four or more partners. Male students were significantly more likely than female students to report having four or more partners. African American students were significantly more likely to report coitus with four or more sexual partners in the last twelve month time period than Euro-American and Hispanic Americans (Kann et al., 1991).

HIV/AIDS-related behavior among gay and bisexual males provided a different focus. In a study of gay and bisexual males, 73% reported being sexually active with 79% of those reporting seldom to no condom use. Sixty seven percent of these youths had engaged in both unprotected anal intercourse, and 33% had engaged in unprotected oral sex (Rotheram-Borus & Koopman, 1991a).

Teen runaway rates of sexual activity of 65% wasn't dramatically different from that found in comparable samples of high school students of 58%. Condom use was reported as inconsistent just as with high school students. Intravenous drug use was not found to be high among runaways (Byrne, 1983).

These surveys among adolescents and young adults indicate that sexually active students know about condoms but reported use is significantly low. By age twenty, over 80% of males and 70% of females report engaging in sexual intercourse at least once (Hayes, 1987). The age of first intercourse is dropping while the number of sexual partners

is increasing. One half to one third of adolescents do not use any form of contraception with one million adolescent females becoming pregnant each year in the United States (Byrne, 1983; Hayes, 1987). Sexually transmitted diseases strike an estimated twenty million people in the United States each year with 85% of all sexually transmitted disease found to occur in teens and young adults (Yarber, 1985). Intravenous drug use is not as common among adolescents as it is among adults and youth who drop out of school (Kann et al., 1991).

Summary

The studies of adolescents presented in the literature presents a composite of their knowledge, attitudes, and behaviors related to HIV/AIDS (DiClemente et al., 1987b; Koopman et al., 1990; McGill et al., 1989; Rotheram-Borus and Koopman, 1991b; Strunin & Hingson, 1987). The surveys indicate that since 1988, adolescents have increased the knowledge of HIV/AIDS transmission but lack the functional skills to lessen the risk of infection (Ross et al., 1991; Strunin et al., 1987). Substantial gender and ethnic differences were found in the surveys. Additionally, a greater proportion of Euro-American adolescents are aware of HIV/AIDS and effective prevention measures than those in other ethnic groups. Sexually active youths know about condoms but reported use has not significantly increased (Kegeles, Adler & Irwin, 1988). Seventy five percent of

males and females have engaged in sexual intercourse, with the age of first intercourse dropping and the number of sexual partners increasing (Hayes, 1987). Thirty percent of sexually active adolescents reported not using any form of contraception (Byrne, 1983).

Intravenous drug use is not common among adolescents. However, youths who drop out of school and live on the streets are at greater risk of infection via this mode of transmission and via high risk sexual encounters.

Adolescents are increasingly well informed about the nature of HIV/AIDS transmission but implementing behavioral changes necessary is less forthcoming. Adolescents have not learned to integrate knowledge into functional, risk-reducing applications (Kegeles et al., 1988; Ross et al., 1991; Strunin et al., 1987; Walters, 1992).

CHAPTER III

METHODS AND PROCEDURES

The procedures used in this study are described in terms of: a) research sample, b) selection of subjects, c) instrument development, d) data collection procedures, and e) research design and data analysis.

Research Sample

The population for this study was chosen from a stratified random sampling of Fall, 1992 traditional in-state college freshmen obtained from Oklahoma's 28 institutions of higher learning which included Research II, Comprehensive, and Two-Year institutions. Twelve hundred respondents were solicited. The subjects were 1992 high school graduates who attended Oklahoma's Public Schools in the same school district from 1987 to 1992 having received the full impact of the mandated HIV/AIDS education legislated in 1986-87.

University and college student offices were contacted by telephone and in writing for permission to allow their freshmen to participate in the study. Administration procedures were designed to protect student's privacy and allow for voluntary, anonymous participation.

Selection of Subjects

The subjects selected for this study were limited to twelve hundred Fall, 1992 traditional in-state college freshmen chosen from a stratified random sampling of Oklahoma's 28 institutions of higher learning. Based on the Carnegie Classification System of Institutions of Higher Education, Oklahoma's institutions include two Research II Universities, ten Comprehensive Universities, and sixteen Two-Year Institutions. The subjects were no younger than 18 years old and no older than 20 years old, were 1992 high school graduates, and had attended Oklahoma Public Schools in the same school district since 1987. Subjects represented the Northwest, Northeast, Southwest, and Southeast quadrants of the state via their higher education sites. A minimum of one Comprehensive University and one Two-Year institution was selected to represent each quadrant of the state.

Prior to initiating the study, a conservative estimate of an anticipated sample size (n) was calculated using the following formula, represented in Table I. From this formula a desired sample size of 385 respondents was calculated. Therefore with a conservative estimate of one-half of all responses meeting the study criteria, at least 770 survey contacts were required.

TABLE I
SAMPLE SIZE PROJECTED

$$n = \frac{t^2}{E^2} P(1 - P)$$

where n = sample size
t = 1.96 (for 95% confidence level)
E = 0.05 (maximum desired probability of error)
P = 0.50 (conservative probability of eligible responses)

In order to assure this confidence level, the researcher developed a sample base of 1200 eligible freshmen in Oklahoma public colleges and universities in the Fall of 1992. From this sample, it was estimated that at least half would have been graduated from high school in the spring 1992 and would have been in a given public school during their seventh through twelfth grade levels. In addition, the researcher selected an alpha of 0.01 to provide further rigor in the analysis of the data. There was a 67% return response rate, and of that, 426 met the selected criteria.

Subjects were proportionally selected based on the total number of freshmen within each institution as reported by the Oklahoma State Regents for Higher Education Fall, 1991. Institutions randomly selected by type and region were coded and remain confidential. Table II and Table III demonstrated the formulas utilized.

TABLE II
 BREAK-DOWN OF COLLEGE FRESHMEN BY TYPE
 OF INSTITUTION IN OKLAHOMA

Institution Type: (Coded #'s)	Total Freshmen (Fall '91)	Randomly Selected Clusters	Actual Sample Solicited
<u>Research II:</u>			
#1	2350	--	--
#2	2213	2213	173
<u>Comprehensive:</u>			
#3	1191	1191	93
#4	596	596	47
#5	769	769	60
#6	400	400	31
#7	608	--	--
#8	779	--	--
#9	826	826	64
#10	546	--	--
#11	332	--	--
#12	207	--	--
<u>Two-Year:</u>			
#13	786	--	--
#14	506	506	39
#15	625	625	49
#16	983	--	--
#17	552	--	--
#18	402	402	31
#19	3251	3251	253
#20	361	--	--
#21	752	--	--
#22	366	366	38
#23	484	--	--
#24	727	--	--
#25	173	173	14
#26	417	--	--
#27	1793	1793	140
#28	2156	2156	168
	25358	15385	** 1200
** Designated # of Respondents Solicited for Study			

TABLE III
 PROPORTIONALLY CALCULATED SAMPLE
 BY TYPE OF INSTITUTION

	Research II	Comprehensive	Two-Year
Total Number of Freshmen	4563	6251	14334
Randomly Selected Cluster of Freshmen	2213	3782	9390
Number of Solicited Freshmen Chosen from Cluster for Study	173	295	732
Proportion of Solicited Freshmen from Cluster	14.4%	24.6%	61.0%

Note: 173 + 295 + 732 = 1200

Formula: $\frac{\# \text{ for each cluster (institutional type)}}{\text{total \# from randomly selected clusters}} \times 1200$

Instrument Development

The HIV/AIDS survey was a 75 item questionnaire developed by the Centers for Disease Control, Division of Adolescent and School Health in 1988, and revised in 1989 and 1990. Parts I, II, III of the instrument were developed for administration to students in grades nine through

twelfth. Parts IV, V, and VI of the survey included demographics, teaching models, and updated knowledge-based questions resulting from the most recent review of literature promulgated by the Centers for Disease Control.

Part I, questions 1-10, was related to HIV/AIDS attitudes and was measured on a Likert-Type scale with (1) being "strongly disagree" and (5) being "strongly agree." Part II, questions 11-19 related to health behaviors and were descriptive in nature. Respondents chose the behavior that best described them. Part III, questions 20-46, related to HIV/AIDS knowledge and were measured on a Likert-Type scale with (1) being "I'm sure it's false" and (5) being "I'm sure it's true." Part IV, questions 47-51, were used to qualify a subjects inclusion into the study. Questions, 52-57, in Part IV addressed time on task as it related to HIV/AIDS instruction. Questions 59 and 60 related to models of teaching HIV/AIDS. Questions 61-65, Part IV, related to HIV/AIDS taught within a comprehensive health education curriculum. Part V, question 66 ranked levels of influence over the respondents behaviors as it related to HIV/AIDS with (1) being "the most important" and (5) being "the least important." Part V, questions 67-73 were knowledge related questions based on more recent literature promoted by the CDC since 1990. Question 74 in Part V addressed intravenous drug use by the subjects. Question 75, Part VI, requested input from respondents for improving Oklahoma's mandated HIV/AIDS curriculum. Finally, questions 11-19 and question

74 could be perceived as personal or sensitive by the respondents. Items 11-19 contained questions about sexual behavior and knowledge with respect to sexually transmitted diseases and HIV/AIDS. Item 74 addressed intravenous drug use by the respondents as it related to HIV/AIDS. Therefore, no names appeared on the questionnaire and survey directions informed potential subjects that their participation was voluntary and in no way was required or related to the class in which they were enrolled.

Data Collection Procedures

After permission to conduct the study was granted by the Review of Human Subjects Research, Oklahoma State University Institutional Review Board, the author contacted each selected institution's Student Services Office. Telephone and written solicitation were elicited. A site liaison was secured who delegated the selection of cooperating faculty from generic classes identified by the institution as freshmen courses. This site liaison selected cooperating faculty to direct the administration of the instrument at their institutions.

The instrument was to be administered to the subjects between September 1 and September 30 of 1992. Surveys were mailed to each selection site by August 31, 1992. This date was chosen so that students would be responding more from their secondary based knowledge and experience rather than from their college based knowledge and experience.

Once contacted, the Student Services Office received a letter of solicitation regarding the purpose of the study, issues of confidentiality, and survey administration procedures. Additionally, the site liaison received a *For Your Information* (FYI) question and answer sheet, the instrument, and directions for the selected cooperating faculty on survey administration. A copy of each of these can be found in appendixes.

The Survey was administered in generic classes identified by the institution as freshmen courses. The estimated time block for distributing, reciting verbal directions, and completing the 75-item HIV/AIDS survey was 30 minutes. To insure anonymity, students were instructed to seal their completed booklet with the adhesive tabs provided. The completed survey booklet was then placed by the student into a postage-paid envelope addressed to the researcher. The last student to complete his/her survey was instructed to seal the postage-paid envelope containing all the completed survey booklets in front of the cooperating faculty member and the class participants. The cooperating faculty member returned the postage-paid sealed envelope to the Student Services Office for mailing to the OSU researcher.

Research Design and Data Analysis

The correlational technique involving multiple comparisons was utilized to determine relationships between

mandated HIV/AIDS education and knowledge, attitudes, and health behaviors of students. A stratified random sample of Fall, 1991 traditional in-state college freshmen from state-supported institutions of higher learning across the State of Oklahoma were the subjects for this study. Data analysis was primarily descriptive in nature and students' accurate perceptions on their knowledge, attitudes, and health behaviors were accepted on their face value for the particular point in time. The correlational analysis involving multiple comparisons necessitates an alpha level of significance of 0.01 to test hypotheses regarding expected relationships and to assure against Type I errors. The System for Statistics for the PC (SYSTAT) was utilized to analyze the data on a personal computer.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The purpose of this study was to investigate the relationship of mandated HIV/AIDS education in Oklahoma Public Schools to knowledge, attitudes, and behaviors of in-state college freshmen. This study investigated 1992 traditional in-state college freshmen who were the first students in Oklahoma to receive the benefits of HIV/AIDS education mandated by the Oklahoma State Legislature in July of 1987 via H.B. 1476. Additionally, subjects were second semester eighth graders in 1988, when the Oklahoma State Department of Education received a one million dollar five-year non-competitive grant to support school health education to prevent the spread of HIV, ostensibly allowing these students to receive the full impact of the two health documents

Out of the 426 subjects, 48% were males and 52% were females. Subjects were at least 18 years of age and were born on or after January, 1972. The subjects were 1992 high school graduates who attended Oklahoma's Public Schools in the same school district from 1987 to 1992. Subjects were

limited to Fall, 1992 in-state college freshmen chosen from a stratified random sampling of Oklahoma's 28 institutions of higher education. Subjects represented the Northwest, Northeast, Southwest, and Southeast quadrants of Oklahoma, representing 121 different public school districts (Appendix E). Subjects were proportionally selected based on the total number of freshmen within each institution as reported by the Oklahoma State Regents of Higher Education Fall, 1991 (Oklahoma State Regents for Higher Education, 1992). The sample represents approximately 5% of in-state college freshmen. Figure 1 represents proportionally the total number of freshmen solicited within each type of institution.

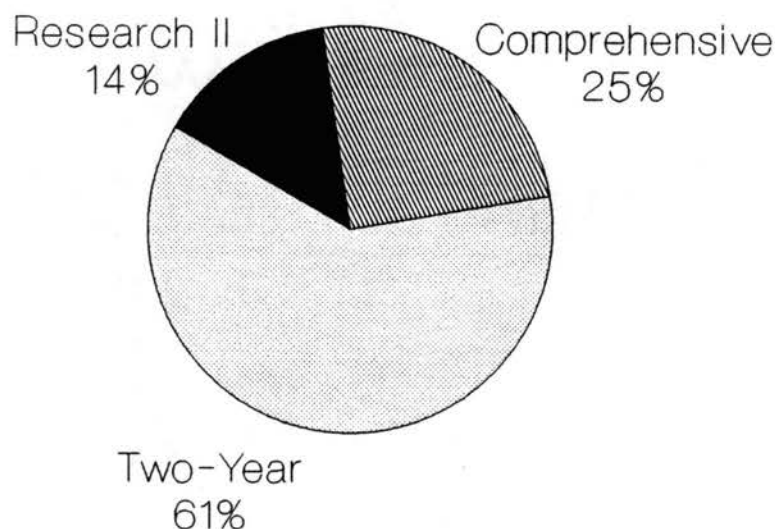


Figure 1. Percentage of Subjects Solicited By Type of College

Institutions were randomly selected by type and region, then coded to assure confidentiality. Knowledge, attitudes, and health behaviors were compiled based on responses to the questionnaire which was developed by the Centers for Disease Control, the Division of Adolescent and School Health, Atlanta (refer Appendix A). Data collectors administered the questionnaire in September of 1992 in an attempt to survey the freshmen before they received college related HIV/AIDS information. Administration procedures were designed to protect the subjects' privacy and allow for voluntary, anonymous participation. Subjects did not represent any specific risk groups.

The survey was administered in generic classes identified by the institution as a freshmen course. Upon completion of the instrument, students were instructed to seal their questionnaire booklet with adhesive tabs. The completed survey was then placed by the student into a postage-paid envelope addressed to the researcher. The last student to complete his/her survey sealed the postage-paid envelope in front of the data collector and class participants. The data collector returned the sealed envelope to their respective Student Services Office for mailing to Oklahoma State University's research representative.

Presentation of Results

This HIV/AIDS study was the first state-wide college based survey in Oklahoma to measure HIV/AIDS-related knowledge, attitudes, and health behaviors among a stratified random sampling of Oklahoma college freshmen. HIV/AIDS-related health behaviors provide evidence of risk for HIV infection and other serious health problems. From the total usable sample (n=426) 325 or 76% reported having had sexual intercourse with 101 or 23.7% reporting sexual abstinence. Figure 2 depicts sexually active and non-sexually active college freshmen.

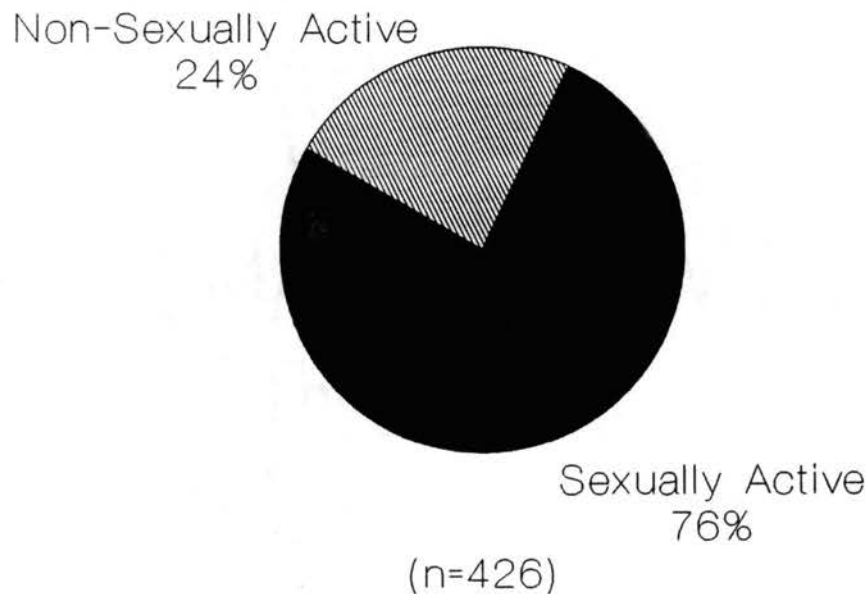


Figure 2. Sexually Active and Non-Sexually Active By Percentage

Of the 325 sexually active respondents, 51.7% were males and 48.7% were female. Of the 101 who reported being sexually inactive, 36.6% were male and 63.4% were female.

Sexually active subjects were asked the number of different sexual partners with whom they had experienced coitus within their lifetime. Figure 3 represents the number of sexual partners as reported by sexually active respondents by gender.

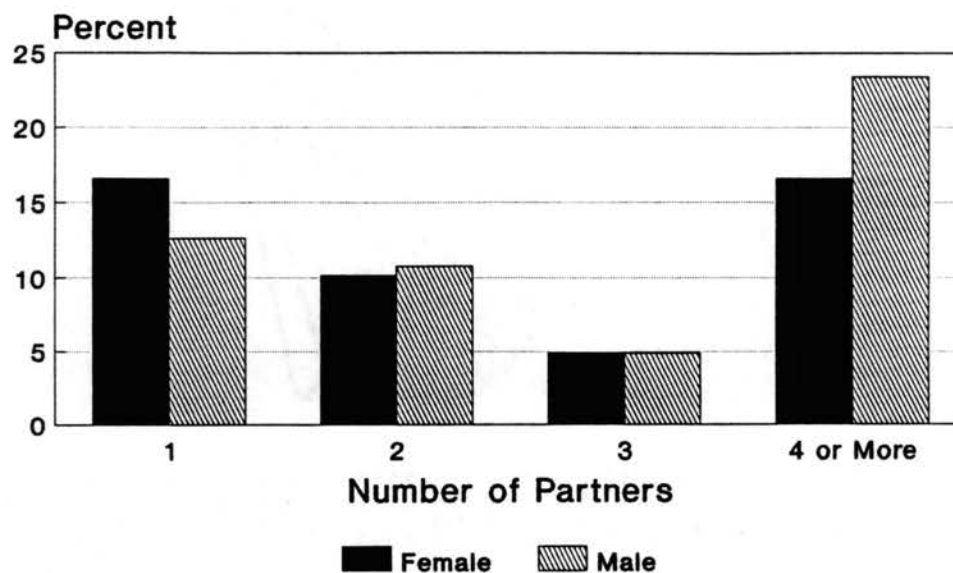


Figure 3. Life-time Number of Partners By Gender

Of these respondents, 29.2% reported one sexual partner, 20.9% experienced two different partners, 9.8% reported having had sexual intercourse with three or more different

partners and 40.0% reported sexual coitus with four or more different partners: of that percentage 23.4% were males and 16.6% were females.

Subjects were asked about behavior three months prior to responding to the HIV/AIDS questionnaire. Respondents were asked how many different sexual partners had they had sexual intercourse with in the prior three months to this study. The percentages consisted of 72.3% reporting one partner, 13.2% reporting two partners, 3.4% reported three partners, and 4.9% reported four or more partners. Of the 4.9% reporting four or more partners in the past three months prior to responding to the survey, 4.6% were male and 0.3% were female.

The question was asked at what age did first intercourse take place. Ages fifteen and sixteen received the largest percentages with 23.4% and 28.0% respectively. At seventeen years of age, 21.2% reported first intercourse. First intercourse at twelve years old or younger was reported by 2.8% of the subjects with 2.2% of that figure male and 0.6% female. Of the respondents, 4.0% reported first intercourse at age thirteen years with 11.1% reporting first intercourse at fourteen years with 3.7% of that figure female and 7.4% male. Those reporting first intercourse at age eighteen years consisted of 9.5% of the sexually active respondents. Figure 4 (refer next page) represents age of first intercourse by sexually active respondents.

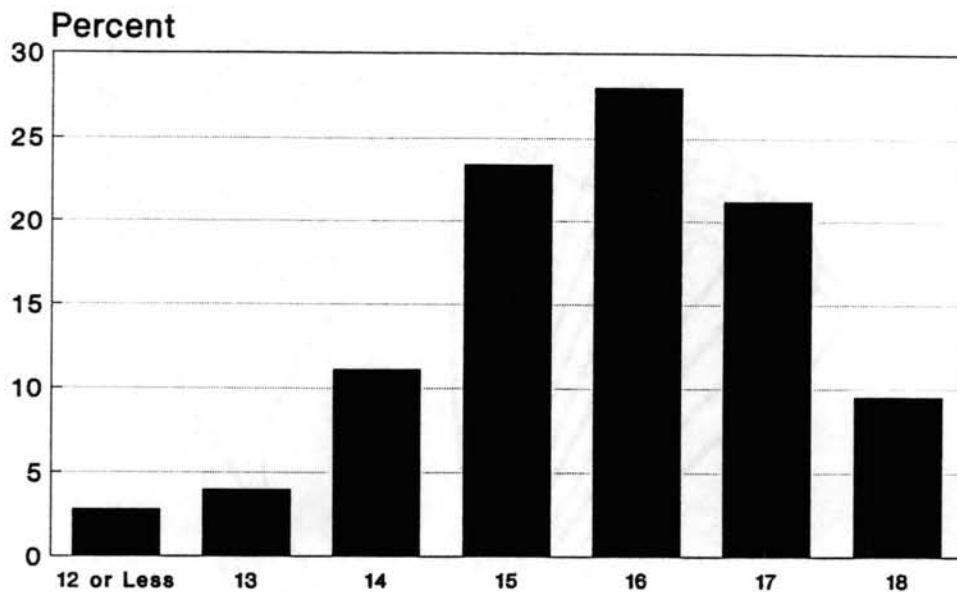


Figure 4. Age of First Sexual Intercourse

Subjects were asked what methods of protection were used against HIV/AIDS, sexually transmitted disease, and unwanted pregnancy during subjects last coitus prior to taking the HIV/AIDS survey. Of these respondents, 25.2% reported either no protection or use of the withdrawal method by partners. Of those respondents utilizing protection 36.6% reported use of the birth control pill and 38.2% reported condom usage. Of the 38.2% reporting condom use, 25.2% were male and 12.9% were female. Figure 5 (refer next page) depicts types of protection utilized by the students.

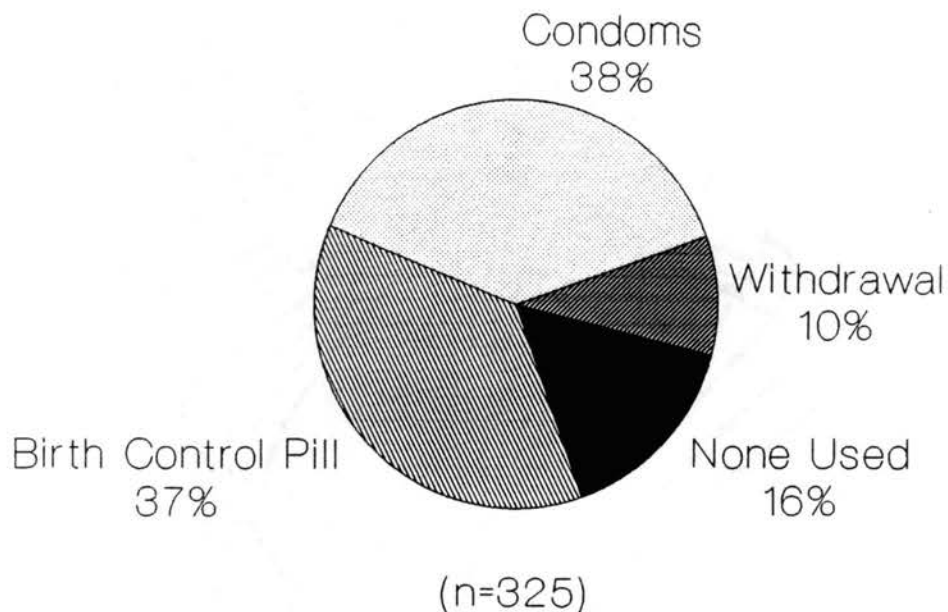


Figure 5. Method of Protection Used During Last Sexual Intercourse

Subjects were asked how many times they had either been pregnant or impregnated a partner. Ten percent responded affirmatively and of that 3.7% were males and 6.5% were female. Additionally, a question was asked regarding a diagnosis of a sexually transmitted disease other than HIV in which 3.4% reported such a diagnosis with 0.6% of that being male and 2.8% of that figure being female.

Regarding protection from HIV, sexually transmitted disease, and unintended pregnancy, sexually active respondents were asked if condoms were used to protect against these during their last experience with intercourse prior to responding to the HIV/AIDS survey. Overall, 39.1%

reported condom use and 60.9% reported not using condoms. Of the 39.1% using condoms, 21.8% were male and 17.2% were female. Of the 60.9% not using condoms, 29.8% were male and 31.1% were female.

A question addressing alcohol use during last coitus was presented. Figure 6 represents reported alcohol and drug use by sexually active respondents during last intercourse.

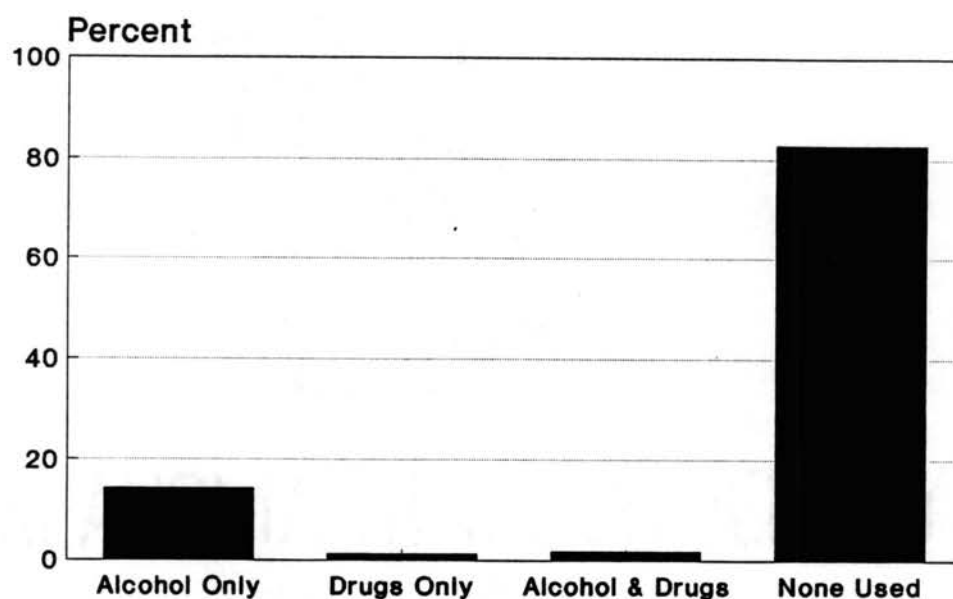


Figure 6. Substance Abuse Used During Last Sexual Intercourse

Over 82.8% of the sexually active respondents reported no alcohol use. Alcohol use was reported by 14.2% of the sexually active subjects, 1.2% reported drug use, and 1.8%

reported using both alcohol and drugs during their last sexual encounter.

Finally, all subjects, both sexually active and non-sexually active, may be at risk from HIV infection because they have injected illegal drugs. Of the freshmen subjects, 5.4% reported having injected illegal drugs. This extrapolates into an estimated 1375 traditional in-state college freshmen having injected illegal drugs.

The HIV/AIDS survey addressed potential biases relating to the respondents' attitudes toward HIV-carriers and/or individuals with full blown AIDS. The questionnaire items were framed in a college classroom setting, thereby, focusing on attitudes related to potentially casual not intimate contact with an HIV-carrier.

Concerning an instructor or teacher with HIV/AIDS, the respondents were asked if it would be difficult for them to work with such an instructor. Of the respondents, 31.6% reported no hesitation with 9.1% finding it difficult and 37% unsure as to their reaction. Regarding respondents behaving differently toward a teacher with HIV/AIDS, 28.1% reported no change in their behavior and 30.7% uncertain.

Willingness to work with an infected classmate on group projects, 24.4% reported to be were willing to work with such a classmate with 8.4% unwilling and 31.9% unsure. The negative treatment of a classmate with HIV/AIDS would not be initiated by 30.7% of the respondents with 27.9% unsure and 7.7% reporting a negative response to a classmate with

HIV/AIDS. Fear of a classmate with HIV/AIDS was reported by 21.3% of the subjects with 14.1% disagreeing and 33% uncertain. Regarding separation of a classmate with HIV/AIDS from non-infected classmates, 47.3% reported that was not necessary with 5.6% believing it necessary, and 28.6% unsure. Approximately 34.6% of the female respondents reflected open attitudes as compared to 22% of the males identified with open attitudes. Overall, 32% of the subjects were uncertain as to their attitudes toward a potential HIV infected classmate.

Additionally, items addressed casual contact by way of touching books, pencils or inanimate objects belonging to an HIV infected person. Of the respondents, 55% reported no concern with 21.3% unsure. Respondents were asked if a student infected with HIV/AIDS should be observed at all times by an instructor so as not to allow this student to infect other students. Of the sample, 41.2% felt such action was unnecessary, 14.2% felt it was necessary, with 22.5% unsure.

Concerning food handlers that are either students or adults with HIV/AIDS, 33% of the respondents did not think these individuals should handle food. Of the remaining subjects 12.4% were not concerned and 24.6% were uncertain.

Finally, the question was asked whether adults who acquired HIV/AIDS ... "got what they deserved." Overwhelmingly, 68.4% disagreed with the statement, indicating attitudinal enlightenment by the majority of the

subjects. Of those disagreeing, 62.4% were males and 74.1% were females with 18.9% not sure about the implications of the statement. Table IV reviews significant questions reflecting HIV/AIDS-related attitudes of subjects.

TABLE IV
ATTITUDE TOWARDS SOMEONE WITH HIV/AIDS

	Strongly Agree	Uncertain	Strongly Disagree
I would find it difficult to work with an HIV/AIDS infected instructor	24.4%	31.9%	8.4%
Students who have AIDS should be kept separate from uninfected students	5.6%	28.6%	47.3%
If one of my instructors had AIDS, I would not behave any differently toward that instructor	9.1%	37.0%	31.6%

The study investigated basic knowledge related to HIV/AIDS transmission and issues related to HIV antibody testing and mandatory testing. Subjects were also asked to respond to models in which their HIV/AIDS curriculum was taught as well as time on task in the public school setting. Further, subjects prioritized the impact of school in

relation to their HIV/AIDS-related knowledge, attitudes, and behaviors.

Survey items addressed body fluids that were not blood products and unrelated to HIV/AIDS transmission. Sweat, tears, and urine are not known to transmit HIV/AIDS. Overall, 55% of the subjects knew that HIV/AIDS is not transmitted through tears with 19% unsure. Fifty percent agreed HIV/AIDS cannot be transmitted via sweat with 23.7% of the same respondents unsure. Concerning urine, 24.8% know urine is not recognized as a body fluid conducive of the HIV infection, however, 35.4% of the same respondents were unsure of this fact.

Subjects' knowledge regarding exposure to HIV/AIDS by way of restrooms, recreation facilities, eating utensils, and vectors was determined. Of the respondents, 61.8% do not believe one can get HIV/AIDS from a toilet with 13.8% unsure. Of the subjects, 60.9% are certain HIV/AIDS cannot be transmitted via a public swimming pool with 15.7% unsure. The subjects' responses regarding infection by way of a used drinking glass showed 63.2% certain HIV/AIDS cannot be acquired through this means. However, regarding transmission of HIV/AIDS by way of a vector such as a mosquito, 25.1% of the subjects were not sure but 44% acknowledged such transmission as non-existent. Knowledge of documented modes of HIV/AIDS transmission were examined. Over 80% of the subjects knew semen was a conduit of HIV/AIDS transmission and that a mother with HIV/AIDS could

infect her unborn fetus. Of the subjects, 68.6% acknowledged that clear vaginal secretions were conduits of HIV infection, but only 20.4% knew that menstrual blood was infectious. However, 47.1% of the respondents knew that semen was classified as a blood product with 42.6% acknowledging that males infected with HIV/AIDS were more efficient sexual transmitters of HIV than the HIV infected female. Of the respondents, 90.9% knew that HIV/AIDS was not a male isolated disease. Table V represents significant questions regarding body fluids and modes of HIV/AIDS transmission.

TABLE V
KNOWLEDGE OF BODY FLUIDS AND MODE
OF HIV/AIDS TRANSMISSION

	Strongly Agree	Uncertain	Strongly Disagree
Males who have HIV/AIDS can give it to another person through their semen.	81.5%	4.2%	1.4%
Females who have HIV/AIDS can give it to another person through vaginal fluids.	68.6%	10.8%	1.9%
People who have HIV/AIDS can give it to another person through their urine (pee).	9.8%	35.4%	24.8%
Blood from a women's period (menstrual blood) is more efficient as a carrier/transmitter of HIV/AIDS to a sexual partner than clear vaginal secretions.	20.4%	69.3%	9.8%

Blood transfusions and blood donations were addressed. Eighty-eight percent of the subjects knew that one can become HIV infected by receiving HIV infected blood by way of a medical blood transfusion. Concerning safety of the U.S. blood supply, 29.5% were sure of the safety of the U.S. blood supply, 22.5% questioned its safety, and 16.2% were unsure of its safety. Misconceptions of HIV/AIDS transmission via blood donations was evident in that 49.3% of the respondents were unclear about acquiring HIV/AIDS via blood donations. Figure 7 represents attitudes regarding the safety of the U.S. blood supply.

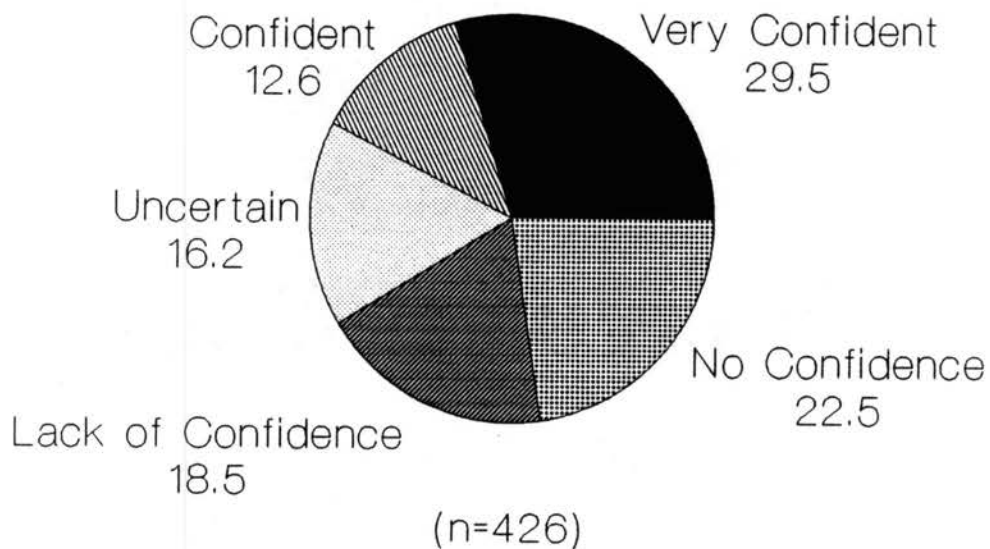


Figure 7. Confidence in the Safety of U.S. Blood Supply

Regarding sexual abstinence, over 69% of the subjects knew that this was one means to avoid HIV infection. Items addressing drug use showed that 85.5% of the respondents knew that avoiding the sharing of intravenous needles eliminated HIV/AIDS via that mode of transmission. Respondents were unclear as to reducing the spread of HIV/AIDS by cleaning intravenous needles with bleach, only 15.9% knew this information with 37.5% unclear.

Of the subjects, 66% were aware that an HIV infected person does not have to look sick to be infected. Of those responding, 82% knew one may have HIV and not know it with 61% understanding the implication of the window period in HIV testing.

Concerning protection from HIV/AIDS, 71.7% were aware that condoms reduced the chances of HIV exposure for sexually active people. Of the subjects, 77% knew that condoms were not 100% safe. Regarding protection from HIV/AIDS by means of the birth control pill, 85.9% of the subjects knew the pill was not a means of protection against HIV infection.

Testing for HIV was reviewed. Eighty-eight percent of the subjects knew one could get a test for HIV and 53% knew you could test negative for HIV and still be HIV infected. Additionally, 94.6% of the subjects believe healthcare workers should be tested for HIV with 79.2% believing HIV testing should be a requirement for marriage. Finally,

66.7% of the subjects believed in mandated testing for all patients admitted to a hospital as shown in Figure 8.

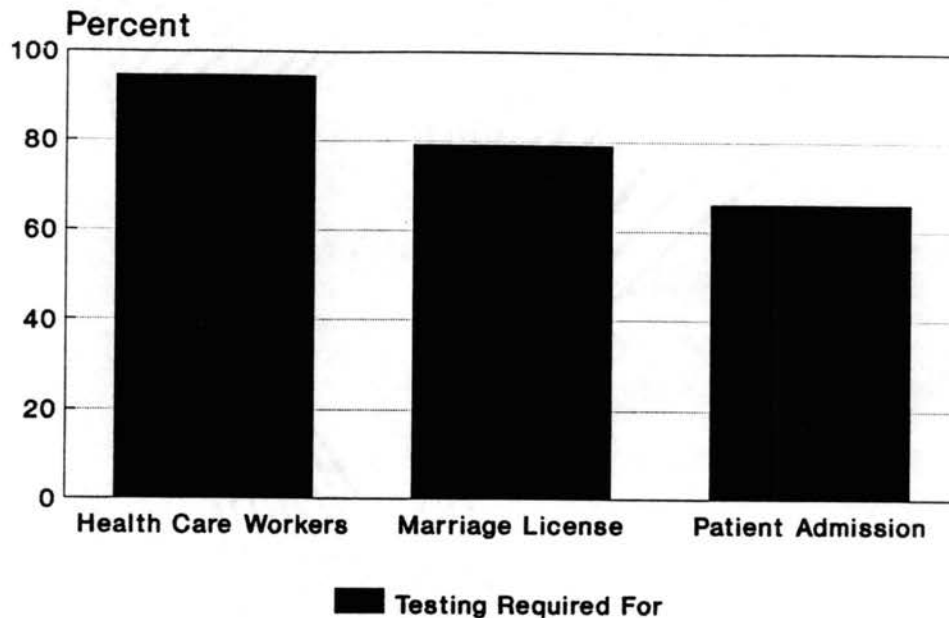


Figure 8. Mandatory HIV Testing

The majority of the respondents, approximately 70%, agreed HIV/AIDS should be taught in grades first through twelve. Of the subjects, 71% reported receiving specific HIV/AIDS education in grades seven through twelve. However, as seventh graders, 45% reported no such education with 29% of those reporting in the affirmative receiving less than two hours time on task in their HIV/AIDS education with 70% of those not receiving a method of instruction involving functional skills related to prevention.

Subjects reporting instruction in HIV/AIDS education in grades eight and nine, 38.6% reported no HIV/AIDS education in eighth grade and 38.9% reporting no HIV/AIDS education in ninth grade. Thirty-eight percent of the subjects reported having no HIV/AIDS education in the eighth grade of less than two hours of time of task. In ninth grade, 47.1% receiving HIV/AIDS education had less than two hours time on task. Among seventh, eighth, and ninth graders, 70% were presented a curriculum that lacked functional skills related to successful prevention education.

In tenth, eleventh, and twelfth graders 73.3% of the subjects received no instruction involving practical, functional skills related to HIV/AIDS prevention and protection. Of these subjects, 23% had no HIV/AIDS education in tenth grade with 46.6% receiving less than two hours of time on task in HIV/AIDS prevention education. The eleventh grade experience related by the respondents revealed that 29.5% received no HIV/AIDS education and of the 39.3% reporting having been instructed in HIV/AIDS prevention they received less than two hours of time on task. Subjects in twelfth grade recalled that 33.5% received HIV/AIDS instruction of less than two hours. Twenty-nine percent responded to no HIV/AIDS education in the twelfth grade. Figure 9 (refer next page) presents a bar chart representing the subjects' time on task in HIV/AIDS education in grades seven through twelve.

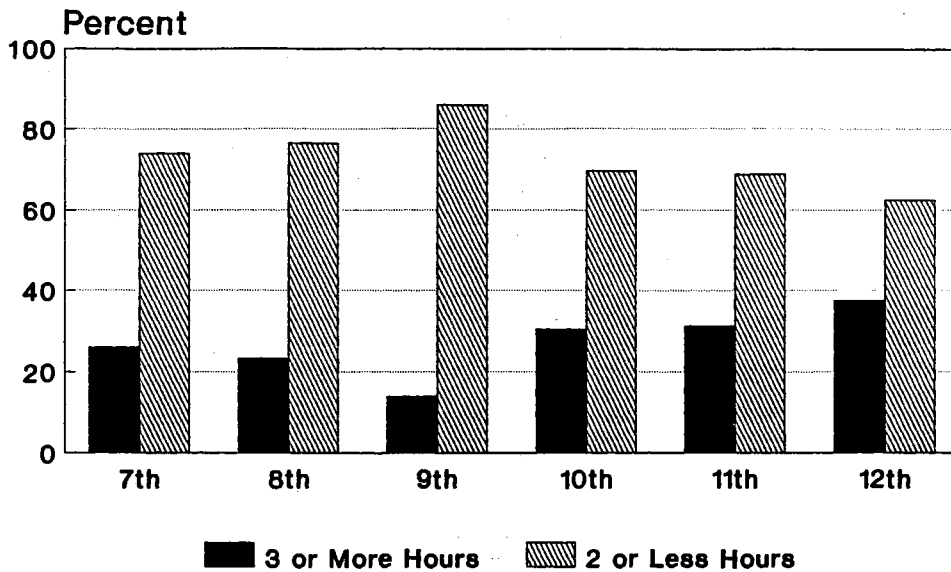


Figure 9. HIV/AIDS Prevention Education: Time On Task

Classroom teachers, school counselors, school nurses, school principals, and guest speakers were the key instructors providing HIV/AIDS education. HIV/AIDS education in grades seven through twelve was provided approximately 30.9% of the time by an on-site classroom teacher. Guest speakers presented the curriculum to 19.2% of the subjects. School nurses were reported as the HIV/AIDS instructors by 25.5% of the respondents. Counselors and principals made up the remaining 9% and 3.95% respectively. Figure 10 (refer next page) shows those appointed as HIV/AIDS instructors as reported by the subjects.

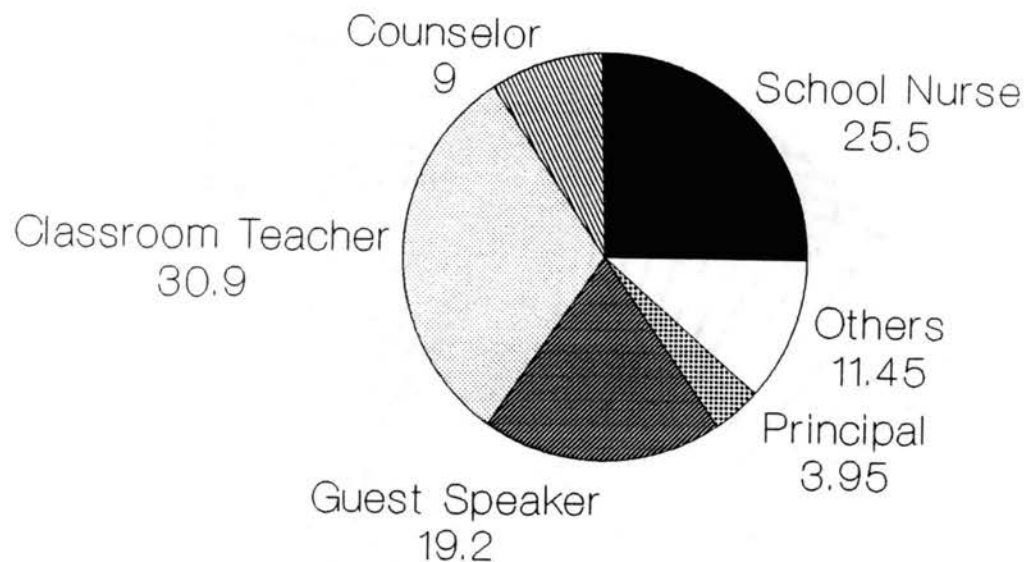


Figure 10. Person Responsible for HIV/AIDS Instruction

Finally, subjects, in order of importance were to prioritize the most important human factor influencing their knowledge, attitudes, and health behaviors related to HIV/AIDS. In order of importance, 30.9% of all respondents listed parents as number one. Twenty five (24.6%) percent of the respondents listed the schools as second. Thirdly, celebrities were listed by 17.3% as most influential of their choices with 15.5% listing friends and peers as fourth. Lastly, the church was selected by only 11.7% of the subjects as the most influential source regarding their choices and behaviors. Figure 11 (refer next page) displays the prioritization of these factors on the knowledge,

attitudes, and health behaviors of subjects in relation to HIV/AIDS.

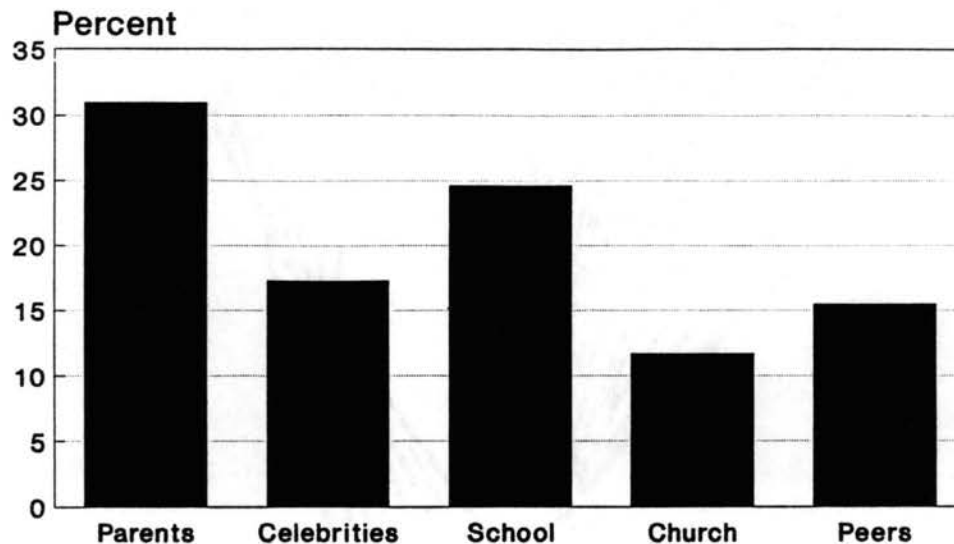


Figure 11. Person With Greatest Impact on Respondents' HIV/AIDS Knowledge/Attitude/Behavior

Analyses of Data According to Hypotheses

Four hypotheses were evaluated in this investigation. An alpha level of 0.01 was selected as the level of confidence.

Hypothesis I

It was hypothesized that there would be no statistically significant correlation between self-reported

time on task in HIV/AIDS prevention education and knowledge gained for all respondents.

Table VI presents a correlation matrix for time on task and knowledge gained. The results indicated that there was no statistically significant correlation between time on task and knowledge gained ($p > 0.01$), and Hypothesis I was not rejected.

TABLE VI
CORRELATION MATRIX FOR TIME ON TASK
AND KNOWLEDGE GAINED FOR
ALL RESPONDENTS

	Time On Task on HIV/AIDS Education	p-value
Knowledge Gained	0.067 (n=426)	0.169

Hypothesis II

It was hypothesized that there would be no statistically significant correlation between methods of instruction and HIV/AIDS knowledge, attitudes, and health behaviors among sexually active respondents.

As shown by the results of the data analysis (refer to Table VII), there were no statistically significant correlation between methods of instruction and HIV/AIDS

related knowledge and attitudes among sexually active respondents. Therefore, Hypothesis II was not rejected ($p > 0.01$).

TABLE VII
CORRELATION MATRIX FOR TEACHING METHOD
AND KNOWLEDGE, ATTITUDE FOR THOSE
WHO ARE SEXUALLY ACTIVE

	Teaching Method	p-value
Knowledge Gained	-0.037 (n=325)	0.501
Attitude Towards People with HIV/AIDS	-0.070 (n=325)	0.207

Hypothesis III

It was hypothesized that there would be no statistically significant correlation between HIV/AIDS knowledge and health behaviors among sexually active respondents.

Table VIII presents a correlational matrix and Figure 12 shows a negative correlation for HIV/AIDS knowledge and health behaviors (number of sex partners).

TABLE VIII
CORRELATION MATRIX FOR KNOWLEDGE
AND BEHAVIOR AMONG SEXUALLY
ACTIVE RESPONDENTS

	Knowledge Gained (HIV/AIDS Education)	p-value
Health Behavior	-0.163 (n=325)	0.003 *
* p < 0.01		

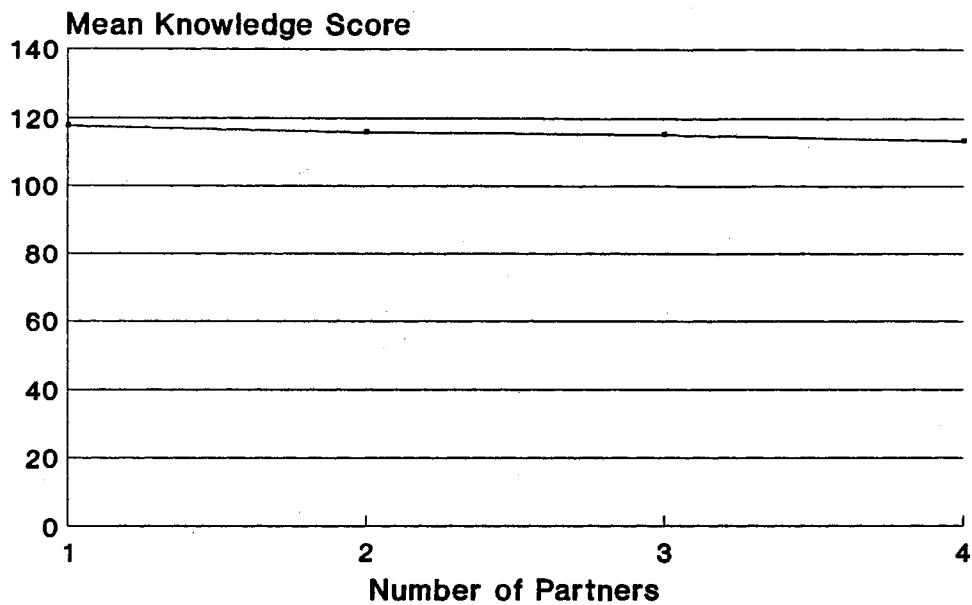


Figure 12. Correlation Between
Knowledge and Sexual Behavior

The results indicated that there was a statistically significant correlation between HIV/AIDS knowledge and

health behaviors among sexually active respondents at the 0.01 level. Therefore, Hypothesis III was rejected.

Hypothesis IV

It was hypothesized that there would be no statistically significant correlation between knowledge of HIV/AIDS and attitudes among all respondents.

As indicated by the results of the data analysis, there was a statistically significant correlation between knowledge of HIV/AIDS and attitudes among all respondents at the 0.001 significant level (refer Table IX).

TABLE IX
CORRELATION MATRIX FOR KNOWLEDGE AND
ATTITUDES AMONG ALL RESPONDENTS

	Knowledge on HIV/AIDS	p-value
Attitudes Towards People w/ HIV/AIDS	0.270 (n=426)	0.000 *
* p < 0.001		

Discussion of Analysis

Based upon the findings and limitations of this study,

the following statements seemed warranted:

1. This study has provided evidence that nearly all college freshmen knew the major modes of HIV/AIDS transmission but do not know that menstrual blood is infectious. This survey also provided information that some subjects continue to have misconceptions about the risk of HIV infection associated with casual contact.

Misconceptions about casual contact need to be corrected but they are potentially less harmful than misconceptions about using birth control pills to reduce risk of HIV infection. Of the respondents, 36.6% use the pill without a condom. This lack of functional knowledge may place subjects at risk for HIV/AIDS.

2. Subjects may be at risk for HIV/AIDS and other serious health problems because they have injected illegal drugs. Of the freshmen respondents, 5.4% reported having injected illegal drugs. This percentage is 2.4% higher than reported nation-wide.

3. Seventy-six percent of the freshmen reported having had sexual intercourse with 40% of these same respondents reporting sexual intercourse with four or more partners. Additionally, 46.6% of these respondents did not use a condom during their last coital contact. These findings place respondents not only at risk for HIV/AIDS, but for other sexually transmitted diseases and unintended pregnancies.

4. The levels of HIV/AIDS-related knowledges, beliefs, and health behaviors among college freshman suggested the need for college based HIV/AIDS education programs to help young adults adopt functional skills to foster positive health behaviors.

5. There was a statistically significant negative correlation between knowledge and health behaviors among sexually active respondents.

6. There was a statistically significant positive correlation between knowledge and attitudes among all respondents.

7. There was no statistically significant correlation between methods of instruction and HIV/AIDS knowledge, attitudes, and health behaviors among sexually active respondents.

8. There was no statistically significant correlation between self-reported time on task and HIV/AIDS prevention education among all respondents.

9. Over 70% of the subjects reported specific instruction in HIV/AIDS education in grades seven through twelve. However, 45% reported no such instruction in seventh grade with 29.7% reporting instruction of no more than two class periods for the entire school term. In eighth grade, 38.6% of the respondents reported no HIV/AIDS instruction with 38% reporting instruction of less than two hours. As ninth graders, 47% of the subjects received instruction of less than two class periods for two semesters

of school. If one notes when first intercourse is consummated, eighth, ninth, and tenth grade are critical in relation to HIV/AIDS prevention education.

10. Subjects reported that 46% received HIV/AIDS education in the tenth grade but with no more than two hours of time on task. In eleventh grade it was reported that 39% of the respondents received HIV/AIDS instruction of less than two hours. For twelfth grade, 33% of the subjects reported specific HIV/AIDS instruction with two or less hours of time on task. Overall, 31% reported specific HIV/AIDS prevention education each school term from seventh to twelfth grade, but with no more than two class periods per year for such instruction.

11. Therefore, the "benefits" of H.B. 1476 provided Oklahoma's youths with a total of ten hours of HIV/AIDS education in a period of five years. Out of approximately 5400 hours of class room time accumulated in five school terms, ten hours were allotted to HIV/AIDS prevention education; thereby making methods of teaching and time on task moot and an indictment of Oklahoma's educational efforts on HIV/AIDS prevention education.

12. A preponderance of uncertainty regarding casual contact with a classmate or instructor with HIV/AIDS was evidenced by the students indicating instruction in this context cannot be overlooked.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter contains a summary of the study, the findings derived from the analyses of data, conclusions, and recommendations. The study was designed to examine the relationship of mandated HIV/AIDS education in Oklahoma Public Schools to knowledge, attitudes, and health behaviors of 1992 in-state college freshmen who attended public school in the same Oklahoma school district from 1987 through 1992. The sample included subjects (n=426) proportionally selected from a stratified random sampling of Oklahoma's 28 institutions of higher education representing the Northwest, Northeast, Southwest, and Southeast quadrants of the state. The sample represents approximately 5% of in-state college freshmen.

From the total usable sample (n=426), 48% were males and 52% were females. Subjects were at least 18 years of age. Subjects' knowledge, attitudes, and health behaviors were compiled and based on responses to the HIV/AIDS questionnaire developed by the Centers for Disease Control,

the Division of Adolescent and School Health, Atlanta. Administrative procedures were designed to protect the subjects' privacy and allow for voluntary, anonymous participation.

The HIV/AIDS questionnaire was solicited in generic classes identified by the institution as a freshman course. Upon completing the HIV/AIDS questionnaire, the instrument was sealed by the student with an adhesive tab then the student placed and sealed the completed survey into a postage-paid envelope address to the researcher.

Findings

The data collected in this study were analyzed and yielded the following findings:

1. There was no statistically significant correlation between self-reported time on task and HIV/AIDS prevention education among all respondents:
 - a) As seventh graders, 74% reported less than two hours of HIV/AIDS prevention education time on task.
 - b) As eighth graders, 76.6% reported less than two hours of HIV/AIDS prevention education time on task.
 - c) As ninth graders, 76% reported less than two hours of HIV/AIDS prevention education time on task.

- d) As tenth graders, 69% reported less than two hours of HIV/AIDS prevention education time on task.
- e) As eleventh graders, 68.8% reported less than two hours of HIV/AIDS prevention education time on task.
- f). As twelfth graders, 64.5% reported less than two hours of HIV/AIDS prevention education time on task.

2. There was no statistically significant correlation between methods of instruction and HIV/AIDS knowledge, attitudes, and health behaviors among sexually active respondents:

- a) As seventh, eighth, and ninth graders, 70% received a method of instruction that lacked functional, self-protective skills related to successful prevention education.
- b) As tenth, eleventh, and twelfth graders, 73.3% received no methods of instruction involving functional, self-protective skills related to successful prevention education.

3. There was a statistically significant correlation between knowledge and health behaviors among sexually active respondents:

- a) There was a statistically significant negative correlation between knowledge and health behaviors among sexually active respondents.

- b) High risk behaviors among sexually active participants increased as knowledge scores decreased.
4. There was a statistically significant correlation between knowledge and attitudes among all respondents:
- a) There was a positive correlation between knowledge and attitudes.
 - b) Attitudinal biases decreased as knowledge increased.
 - c) There was a significant difference between attitudes in relation to gender; females were more attitudinally enlightened than male respondents toward individuals with HIV/AIDS.

Conclusions

Based upon the findings and limitations of this study, the following conclusions seemed warranted:

Over the past decade, many visible signs have warned us of the impending crisis of adolescent health. Many of Oklahoma's children are engaging in health behaviors that endanger their very lives. As this study reflects, the crisis is not isolated to children of poverty or to those victimized by crime. The crisis is the young person who sits in our public classrooms representing all

neighborhoods, all races, all creeds, all economic stratum, and all abilities.

The results of this study should be a direct challenge to Oklahoma's State and Local School Boards, the Oklahoma State Legislature, and the State Superintendent of Education. Persons in these positions are the gatekeepers. These are the ones elected and entrusted with the power to insure Oklahoma's children a better future than the past generation; instead, our children are less healthy, less safe, less cared for, and less prepared for life. There is no question that this status of political paralysis is costing young people their lives. It is time for child advocates to become one voice and demand that children be empowered with the skills necessary to survive the 21st Century.

Oklahoma's children need comprehensive school health education in grades K-12. Oklahoma's current problems are more often rooted in health risk behaviors than in any other facet. Evidence exists about successful teaching modules, strategies and methodology that promote healthy behaviors. There is no need for more task forces. It is time for Oklahoma to make adolescent health and the physical, emotional and social well being of Oklahoma's children a priority, to do otherwise is morally reprehensible.

Recommendations

In consideration of the results and conclusions within the limitations imparted by this study, the following recommendations appear justified:

Recommendations for Improving HIV/AIDS Prevention Education

Many research studies conducted on smoking cessation, alcohol abstention, marijuana discontinuance, and dietary and asthma management identify strategies that positively effect health promoting behaviors. These strategies are directed at methods of instruction, intervention intensity, and the application of a skill-based health model (DiClemente et al., 1987a; Iverson, 1990; Popham, 1989; DHHS, 1988; National Coalition of Advocates for Students, 1988). Oklahoma's public and private schools have the capacity and moral responsibility to effect successful health education to prevent the spread of HIV/AIDS. The schools must help to assure that young people understand the nature of the AIDS pandemic and the specific actions they can take to prevent HIV infection during adolescent and young adulthood. Some of the steps to be taken are:

1. HIV/AIDS prevention education should take place in the context of a comprehensive school health education curriculum or in a family life/sexuality education course that establishes a foundation for understanding the

relationship between personal behavior and health (DHHS, 1988).

2. An HIV/AIDS curriculum must be appropriate to the chronological and developmental age of the student and should be taught in small groups of 20 or fewer students (National Coalition of Advocates for Students, 1988).

3. Health promoting behaviors increase in direct proportion to the amount of time on task and the methods of instruction provided in the health curriculum (Iverson, 1990). Comprehensive school health education should be a minimum of twenty eight hours each school term with a five-hour HIV/AIDS component.

4. A program not providing HIV/AIDS education within a comprehensive school health curriculum, should be a minimum of fifteen hours each school term to effect health promoting behaviors (Iverson, 1990).

5. Methods of instruction, to be successful, must be skill-based, focus on behavior, and involve modeling, guided practice, independent practice, feed-back, and review (Popham, 1989).

6. Adolescents must not be allowed the option of ignoring HIV/AIDS education. School systems must make HIV/AIDS risk reduction programs compulsory. Without compulsory health education, a window of vulnerability is created through which many adolescents exist.

7. Programs in HIV/AIDS prevention education should be standardized across the state thereby permitting adolescents

from any geographical location or school district to be equally knowledgeable about HIV/AIDS.

8. Training teachers who teach HIV/AIDS prevention should be more rigorous than staff in-service. Teachers who will be teaching HIV/AIDS prevention education must receive more comprehensive school health education training through graduate level credit.

9. An HIV/AIDS prevention education program, that is a part of a comprehensive school health education program, should include fourteen hours of teacher training in comprehensive school health education with an additional six hours of training in HIV/AIDS prevention education (DHHS, 1988).

10. An HIV/AIDS prevention education program, that does not have the support of a comprehensive school health education curriculum, should include a minimum of twelve to fourteen hours of teacher training in HIV/AIDS prevention education. Teacher training must be continuous and ongoing (DHHS, 1988).

11. Instructors teaching HIV/AIDS should be trained to impart information to students in a way which personalizes the issues. Teacher training should enable teachers to demonstrate techniques for teaching functional, self-protective skills that promote healthy behavioral changes. These skills include, but are not limited to, affective communication, social skills, assertiveness techniques, inoculation against mass media, refusal skills,

peer pressure resistance skills, stress reduction techniques, decision making skills, cultural sensitivity awareness, and parental education.

12. In elementary grades (K-6), HIV/AIDS education should be provided by the regular classroom teacher. Ideally, this individual is trained in child development, age-appropriate teaching methods, child health, and in elementary health education methods and materials (DHHS, 1988).

13. Higher Education and respective Colleges of Education must embrace the role of providing future elementary education teachers with the skills necessary to implement sound elementary health education programs within their classrooms.

14. In the secondary grades (7-12), a qualified health education teacher should provide the instruction about HIV/AIDS. This professional has training in adolescent development, age-appropriate teaching methods, adolescent health, and secondary health education methods and materials including methods and materials for teaching topics such as human sexuality, communicable diseases, and drug abuse prevention (DHHS, 1988).

15. The levels of HIV/AIDS knowledge, attitudes, and behaviors among college freshmen suggest the need for a required college based HIV/AIDS education program within a health and/or wellness unit.

Recommendations for Further Study

1. A repetition of the study utilizing control groups with time on task, certified and non-certified health education teachers, and various methods of instruction as the independent variables.

2. A study focusing on non-sexually active subjects to add wider dimension and depth to the study.

3. A study focusing on ethnicity to add important information to the research.

4. A repetition of the study centered on non-college tract high school seniors and/or eighteen year old high school drop-outs (Appendix H).

5. A comprehensive study surveying a variety of health behaviors among entering college freshmen to monitor the prevalence of behaviors that most affect health.

6. A post-study of this sample of 1992 high school graduates when they exit as graduating college seniors in 1996.

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APPENDIXES

APPENDIX A

INSTRUMENT

HIV/AIDS SURVEY

This survey is about health behavior related to HIV/AIDS. It has been developed so you can tell us what you do that may affect your health. The information you give will be to develop better health education programs for adolescents and young adults.

Some questions may be considered sensitive.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really know, feel, or do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class.

The questions that ask about your background will only be used to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Place all your answers on the questionnaire. Make sure to answer every question. When you are finished, seal the questionnaire booklet with the adhesive tab provided and return your sealed booklet to the proctor/person administering the survey.

Thank you very much for you help.

Screen Questions

A. I am at least 18 years old.

YES _____

NO _____

B. I was born ON or AFTER JANUARY 1972.

YES _____

NO _____

If you have answered NO to EITHER question "A" or "B", please STOP and return the survey to the proctor. Thank You.

If you answered YES to BOTH questions "A" and "B", please turn the page and PROCEED.

TAB

PART I

This survey consists of 10 statements that describe how you regard a student or adult who has AIDS. Read each statement, then CIRCLE the number to the right of each statement that best indicates your agreement/disagreement with the statement. Please answer honestly. Do not write your name on this survey. Your responses should be totally anonymous. All responses to this survey will be kept strictly confidential.

	Strongly Agree 5	Agree 4	Uncertain 3	Certain 2	Strongly Disagree 1
1. I would find it difficult to work with an instructor if the instructor had AIDS.	5	4	3	2	1
2. Students who have AIDS should be kept separate from uninfected students.	5	4	3	2	1
3. I would not be afraid to work in close physical proximity with a classmate who has AIDS.	5	4	3	2	1
4. Students or adults who have AIDS should not be allowed to handle food in a school cafeteria.	5	4	3	2	1
5. Most adults who have AIDS get what they deserve.	5	4	3	2	1
6. I would treat a classmate who has AIDS the same way that I treat all classmates.	5	4	3	2	1
7. I would be reluctant to touch the books, pencils, and other supplies used by a student who has AIDS.	5	4	3	2	1
8. If I learned that one of my instructors had AIDS, I would not behave any differently toward that instructor.	5	4	3	2	1
9. A student with AIDS should be observed by an instructor at all times so that the student does not infect other students.	5	4	3	2	1
10. I would be willing to do a group project with a classmate who is HIV positive.	5	4	3	2	1

PART II

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education programs for young adults like yourself. Read each question carefully. With a **CHECK MARK**, fill in the space that matches the correct response of your answer.

11. Have you ever had sexual intercourse?
- Yes
 No, IF YOU ANSWERED NO, GO TO QUESTION #20
12. With how many persons have you had sexual intercourse?
- 1 person
 2 persons
 3 persons
 4 or more persons
13. During the past 3 months, with how many persons have you had sexual intercourse?
- 1 person
 2 persons
 3 persons
 4 or more persons
14. How old were you the first time you had sexual intercourse?
- 12 years old or less
 13 years old
 14 years old
 15 years old
 16 years old
 17 years old
 18 years old
15. The last time you had sexual intercourse, what method of protection were you or your partner using?
- No method was used
 Birth control pills
 Condoms
 Withdrawal
 Cervical cap

16. The last time you had sexual intercourse, was a condom used to prevent a sexually transmitted disease (STD)?
- Yes
 No
17. The last time you had sexual intercourse, were you or your partner using alcohol or drugs?
- Yes, alcohol only
 Yes, drugs only
 Yes, alcohol and drugs
 No, neither alcohol nor drugs
18. How many times have you been pregnant or gotten someone pregnant?
- 1 time
 2 or more times
 I am not sure
19. Have you ever been told by a doctor or nurse that you have a sexually transmitted disease such as genital herpes, genital warts, gonorrhea, chlamydia, or HIV infection?
- Yes
 No

PART III

This survey measures your knowledge of HIV and AIDS as well as how confident you are of your HIV and AIDS knowledge. Please CIRCLE the number to the right of each statement that best indicates your response to the statement.

- | | I'm sure
it's true | I think
it's true | I don't
know | I think
it's false | I'm sure
it's false |
|--|-----------------------|----------------------|-----------------|-----------------------|------------------------|
| | 5 | 4 | 3 | 2 | 1 |
| 20. Only a person who is sick with the disease AIDS can give HIV/AIDS to others. | 5 | 4 | 3 | 2 | 1 |
| 21. Males who have HIV/AIDS can give it to another person through their semen. | 5 | 4 | 3 | 2 | 1 |

	I'm sure it's true 5	I think it's true 4	I don't know 3	I think it's false 2	I'm sure it's false 1
22. People can reduce their chances of getting HIV/AIDS by using a condom made of latex rubber during sexual intercourse.	5	4	3	2	1
23. People who have HIV/AIDS can give to another person through their blood.	5	4	3	2	1
24. A mother can give HIV/AIDS to her unborn child.	5	4	3	2	1
25. A person cannot get HIV/AIDS by sharing needles that have been used to inject body-building drugs.	5	4	3	2	1
26. People who have HIV always show some signs of being sick.	5	4	3	2	1
27. A person can get HIV/AIDS by being bitten by an insect, such as a mosquito.	5	4	3	2	1
28. A person can get HIV/AIDS by donating blood.	5	4	3	2	1
29. Not using a condom during sexual intercourse with a person who has injected drugs increases a person's chances of getting HIV/AIDS.	5	4	3	2	1
30. A person can get HIV/AIDS by using public bathrooms.	5	4	3	2	1
31. People who have HIV/AIDS can give it to another person through their tears.	5	4	3	2	1
32. Drug users can reduce their chances of getting HIV/AIDS by cleaning needles with bleach before injection.	5	4	3	2	1
33. People can have HIV/AIDS and not know that they have it.	5	4	3	2	1
34. When used during sexual intercourse, condoms protect people from getting HIV/AIDS 100% of the time.	5	4	3	2	1
35. A person who has had a positive HIV-antibody test result can give HIV/AIDS to someone else.	5	4	3	2	1

	I'm sure it's true 5	I think it's true 4	I don't know 3	I think it's false 2	I'm sure it's false 1
36. Females who have HIV/AIDS can give it to another person through their vaginal fluids.					5 4 3 2 1
37. People who have HIV/AIDS can give it to another person through their sweat.					5 4 3 2 1
38. People who have HIV/AIDS can give it to another person through their urine (pee).					5 4 3 2 1
39. A person can get HIV/AIDS by swimming in a pool with an infected person.					5 4 3 2 1
40. A person can get HIV/AIDS by drinking out of a glass that was used by someone who has HIV/AIDS virus.					5 4 3 2 1
41. A person is not likely to get HIV/AIDS by receiving blood transfusion in the U.S.					5 4 3 2 1
42. Only males can give HIV/AIDS to other people.					5 4 3 2 1
43. People who do not have sexual intercourse and who do not share needles can avoid becoming infected with HIV/AIDS.					5 4 3 2 1
44. People can protect themselves from getting HIV/AIDS by taking birth control pills.					5 4 3 2 1
45. People can get their blood tested to see if they have been infected with HIV/AIDS.					5 4 3 2 1
46. HIV-antibody test results can be negative even though a person has been infected with HIV/AIDS.					5 4 3 2 1

PART IV

Read each question carefully. With a CHECK MARK, fill in the space on your questionnaire that matches the correct response of your answer. Thank you.

47. Gender: Male
 Female

48. Did you graduate from high school in 1992?

Yes, IF YOU ANSWERED YES, GO ON TO QUESTION #50
 No

49. If you answered no to question #48, please write in the spaces provided below the year you graduated from high school and from which town or city your high school is located.

_____ Year of High School Graduation

_____ Town or City of Your High School

50. Did you attend grades 7,8,9,10,11, and 12th in the same town or city in Oklahoma?

Yes
 No, IF YOU ANSWERED NO, GO ON TO QUESTION #52

51. If you answered yes to question #50, please write in the space below the name of the town or city in which you attended grades 7,8,9,10,11, and 12th.

_____ Town or City

52. Aside from general classroom discussions in grades 7,8,9,10,11, or 12, did your school provide specific instruction about HIV/AIDS prevention?

Yes
 No

53. Approximately, how much class time was spent on specific HIV/AIDS prevention by your school in 7th grade? A CLASS PERIOD REPRESENTS APPROXIMATELY 55 MINUTES.

There was no HIV/AIDS prevention education in 7th grade.
 2 or less class periods
 3 to 6 class periods
 7 to 9 class periods
 10 to 15 class periods
 16 or more class periods

54. Approximately how much class time was spent on specific instruction about HIV/AIDS prevention by your school in the 8th grade?

- There was no HIV/AIDS prevention education in 8th grade.
- 2 or less class periods
- 3 to 6 class periods
- 7 to 9 class periods
- 10 to 15 class periods
- 16 or more class periods

55. Approximately how much class time was spent on specific instruction about HIV/AIDS prevention by your school in the 9th grade?

- There was no HIV/AIDS prevention education in 9th grade.
- 2 or less class periods
- 3 to 6 class periods
- 7 to 9 class periods
- 10 to 15 class periods
- 16 or more class periods

56. Approximately how much class time was spent on specific instruction about HIV/AIDS prevention by your school in the 10th grade?

- There was no HIV/AIDS prevention education in 10th grade.
- 2 or less class periods
- 3 to 6 class periods
- 7 to 9 class periods
- 10 to 15 class periods
- 16 or more class periods

57. Approximately how much class time was spent on specific instruction about HIV/AIDS prevention by your school in the 11th grade?

- There was no HIV/AIDS prevention education in 11th grade.
- 2 or less class periods
- 3 to 6 class periods
- 7 to 9 class periods
- 10 to 15 class periods
- 16 or more class periods

58. Approximately how much class time was spent on specific instruction about HIV/AIDS prevention by your school in the 12th grade?

- There was no HIV/AIDS prevention education in 12th grade.
 2 or less class periods
 3 to 6 class periods
 7 to 9 class periods
 10 to 15 class periods
 16 or more class periods

59. In grades 7,8 and/or 9th, which of the following were used by your school and your HIV/AIDS instructor to teach HIV/AIDS prevention? (Check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Assembly/Panel | <input type="checkbox"/> Self Esteem Skills |
| <input type="checkbox"/> Guest speaker | <input type="checkbox"/> Refusal/Negotiation Skills |
| <input type="checkbox"/> Person with HIV/AIDS | <input type="checkbox"/> Communication Skills |
| <input type="checkbox"/> Suggestions/Question Box | <input type="checkbox"/> Communication Skills |
| <input type="checkbox"/> Demonstration w/ condom | <input type="checkbox"/> Peer Resistant Skills |
| <input type="checkbox"/> Lecture/Discussion/Debate | <input type="checkbox"/> Decision Making Skills |
| <input type="checkbox"/> Video/Films | <input type="checkbox"/> Skits/Role Play |
| <input type="checkbox"/> Written Test | <input type="checkbox"/> Practice Time Utilizing Skills |

60. In grades 10,11 and/or 12th, which of the following were used by your school and your HIV/AIDS instructor to teach HIV/AIDS prevention? (Check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Assembly/Panel | <input type="checkbox"/> Self Esteem Skills |
| <input type="checkbox"/> Guest speaker | <input type="checkbox"/> Refusal/Negotiation Skills |
| <input type="checkbox"/> Person with HIV/AIDS | <input type="checkbox"/> Communication Skills |
| <input type="checkbox"/> Suggestions/Question Box | <input type="checkbox"/> Communication Skills |
| <input type="checkbox"/> Demonstration w/ condom | <input type="checkbox"/> Peer Resistant Skills |
| <input type="checkbox"/> Lecture/Discussion/Debate | <input type="checkbox"/> Decision Making Skills |
| <input type="checkbox"/> Video/Films | <input type="checkbox"/> Skits/Role Play |
| <input type="checkbox"/> Written Test | <input type="checkbox"/> Practice Time Utilizing Skills |

61. In grades 7,8 and/or 9th, who in your school, was responsible for teaching the specific program about HIV/AIDS prevention in your school?

- School nurse
 School counselor
 Principal/Vice Principal
 Guest Speaker
 Teacher, if you selected teacher, in the space provided write in the subject area this teacher regularly taught, such as, science, English, etc. _____

62. In grade 10,11 and/or 12th, who in your school, was responsible for teaching the specific program about HIV/AIDS prevention in your school?

- School nurse
 School counselor
 Principal/Vice Principal
 Guest Speaker
 Teacher, if you selected teacher, in the space provided write in the subject area this teacher regularly taught, such as, science, English, etc. _____

63. In grades 7,8,9,10,11, or 12th, did you earn at least one unit of credit for a class in one or all of the following?

- Yes No Human Sexuality
 Yes No Comprehensive Health Education
 Yes No Family Life/Family Living

64. In grades 7,8, and/or 9th, was the HIV/AIDS education provided by your school taught in one of the following:

- Yes No Human Sexuality
 Yes No Comprehensive Health Education
 Yes No Family Life/Family Living
 There was no HIV/AIDS prevention education in 7-9 grade

65. In grade 10,11, and/or 12th, was the HIV/AIDS education provided by your school taught in one of the following:

- Yes No Human Sexuality
 Yes No Comprehensive Health Education
 Yes No Family Life/Family Living
 There was no HIV/AIDS prevention education in 10-12 grade.

66. In order of importance, with #1 being the most important, prioritize from most important (#1) to the least important (#5), which has had the greatest impact on your knowledge, attitude, or health behaviors related to HIV/AIDS. Place a NUMBER in the spaces provided.

- Parents
 Celebrities (ie. Magic Johnson, Freddy Mercury, etc)
 School
 Church
 Peers/Friends

PART V

Read each statement carefully. With a **CHECK MARK**, fill in the space that matches the correct response of your answer. Thank You.

67. HIV/AIDS testing should be required of health care workers (doctors/dentists/nurses).

YES _____ NO _____ I don't know _____

68. HIV/AIDS testing should be required before people can legally marry.

YES _____ NO _____ I don't know _____

69. HIV/AIDS testing should be required of all patients who are admitted to public/private hospitals.

YES _____ NO _____ I don't know _____

70. HIV/AIDS should be taught in first through twelfth grade.

YES _____ NO _____ I don't know _____

71. Semen is classified as a blood product and that is why it is an efficient carrier/transmitter of HIV/AIDS during sexual intercourse.

YES _____ NO _____ I don't know _____

72. Blood from a woman's period (menstrual blood) is more efficient as a carrier/transmitter of HIV/AIDS to a sexual partner than clear vaginal secretions.

YES _____ NO _____ I don't know _____

73. HIV infected males can more easily infect their partners during sexual intercourse than HIV infected females.

YES _____ NO _____ I don't know _____

74. During your lifetime have you ever injected (shot up) any drugs (not prescribed by a doctor such as steroids, cocaine, heroin, amphetamines)?

YES _____ NO _____ I don't know _____

PART VI

Based on your experience, in what ways could the mandated AIDS education in Oklahoma schools be improved AND please comment as to your belief in the importance of such education.

SEAL YOUR QUESTIONNAIRE BOOKLET WITH THE ADHESIVE TAB AND RETURN IT TO THE PROCTOR. THANK YOU FOR YOUR TIME AND ASSISTANCE.

APPENDIX B

INSTITUTIONAL REVIEW BOARD

LETTER OF APPROVAL

OKLAHOMA STATE UNIVERSITY
 INSTITUTIONAL REVIEW BOARD
 FOR HUMAN SUBJECTS RESEARCH

Proposal Title: The Relationship of Mandated HIV/AIDS Education in
Oklahoma Public Schools to Knowledge, Attitude, and Behaviors of 1992 in
State College Freshmen
 Principal Investigator: Dr. Betty Edgley / Jan S. Richler
 Date: July 20, 1992 IRB # ED-93-007

 This application has been reviewed by the IRB and

Processed as: Exempt Expedite Full Board Review
 Renewal or Continuation

Approval Status Recommended by Reviewer(s):

Approved Deferred for Revision
 Approved with Provision Disapproved

Approval status subject to review by full Institutional Review Board at
 next meeting, 2nd and 4th Thursday of each month.

 Comments, Modifications/Conditions for Approval or Reason for Deferral or
 Disapproval:

This was a well prepared application which adequately and clearly
 addressed the issues of confidentiality, and informed participation.

Signature: _____

Chair of Institutional Review Board

Date: _____

12/1/92

APPENDIX C

LETTERS OF SOLICITATION



Oklahoma State University

SCHOOL OF HEALTH, PHYSICAL EDUCATION
AND LEISURE

STILLWATER, OKLAHOMA 74078-0616
COLVIN PHYSICAL EDUCATION CENTER
(405) 744-5493
FAX: (405) 744-6507

Mr. Donnie Nero, Dean
Student Services
Tulsa Junior College
Southeast Campus
10300 E. 81st Street
Tulsa, OK 74133

August 14, 1992

(SAMPLE LETTER)


Dear Donnie,

Thank you for agreeing to be the on-site representative/coordinator for this study at your institution. HIV infection culminating in AIDS is the seventh leading cause of death among young people 15 to 24 years old. Young people's lives are at risk.

Your expertise is an absolute necessity if the study is to be accurate. I need you to select the required general education classes most representative of true, first time freshmen at your institution. Secondly, this survey must be administered within the first two weeks of the semester before students receive college level HIV/AIDS education. Thirdly, I need you to engage the cooperation of the instructors of those selected general education classes, explaining the importance of this study. Fourthly, I need you to act as an on-site contact person allowing these cooperating instructors to return the surveys to you via campus mail; and finally, I need you to mail both the completed and the uncompleted surveys to me at Oklahoma State University.

I am truly indebted to you and there is no way, other than my expressed respect and appreciation, that I can ever give to you the acknowledgement and gratitude you deserve. If you need any assistance, clarification, or additional information about the survey and its administration, please do not hesitate to contact me at Oklahoma State University, the School of Health, Physical Education, and Leisure at (405)-744-5493 or (405)-744-9321. Again, I sincerely thank you for your invaluable assistance.

Respectfully,


Jan S. Richter
Researcher



Oklahoma State University

SCHOOL OF HEALTH, PHYSICAL EDUCATION
AND LEISURE

STILLWATER, OKLAHOMA 74078-0616
COLVIN PHYSICAL EDUCATION CENTER
(405) 744-5493
FAX: (405) 744-6507

August 18, 1992

Dear Colleague,

HIV/AIDS is a very serious problem in our nation. Presently, there are approximately 214,000 cases of AIDS with one out of every five cases occurring among those 20 to 29 years old. HIV infection culminating in AIDS is the seventh leading cause of death among young people 15 to 24 years old. Young people's lives are at risk. Health educators are trying to find the best ways to teach people about AIDS and the Human Immunodeficiency Virus (HIV) that causes AIDS.

A doctoral dissertation entitled, "The Relationship of Mandated HIV/AIDS Education in Oklahoma Public Schools to Knowledge, Attitude, and Behaviors of 1992 In-State College Freshmen" is being conducted under the direction of the School of Health, Physical Education, & Leisure at Oklahoma State University. The school-based survey will measure the prevalence of priority health-risk behaviors among Fall, 1992 in-state freshmen.

Education programs should guarantee that young people acquire the knowledge and skills they need to adopt a life-style that virtually eliminates their risk of becoming HIV infected. Their surveillance data can be used to determine both the need for public health action and to re-evaluate health education programs in Oklahoma.

We request that the enclosed surveys be administered to your incoming 1992 freshmen who are at least 18 years old and who were born on or after January, 1972. Participation is voluntary. Survey administration procedures are designed to protect student privacy and allow for anonymous participation. Published reports will not include names of participating schools or students.

Your cooperation and assistance in administering this survey is appreciated. Your professional courtesy is acknowledged. Thank you for your help.

Respectfully,

Jan S. Richter,
Researcher

APPENDIX D
INSTRUCTIONS FOR ADMINISTERING
SURVEY

For Your Information (F. Y. I.)

A doctoral dissertation entitled, "The Relationship of Mandated HIV/AIDS Education in Oklahoma Public Schools to Knowledge, Attitude, and Behaviors of 1992 In-State College Freshmen" is being conducted under the direction of the School of Health, Physical Education, & Leisure at Oklahoma State University. A school-based survey to measure the prevalence of priority health-risk behaviors among Fall, 1992 in-state freshmen will be administered.

1. What is the focus of the survey?

The survey focuses on priority health-risk behaviors established during youth that result in the most significant mortality, morbidity, disability, and social problems during both youth and adulthood. These include sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies.

2. Does the survey have broad national support?

The survey is supported by many major organization. The American School Health Association, National PTA, National Education Association, and the National Association of State Boards of Education.

3. Are sensitive questions asked?

Some questions may be considered sensitive. AIDS/HIV infection, and other sexually transmitted diseases are major health problems. Sexual intercourse and intravenous drug use are among the behaviors known to increase risk of HIV or other sexually transmitted diseases. The only way to determine if youth are at risk of becoming infected with HIV or other sexually transmitted diseases is to ask questions. Questions are asked in a straight forward and sensitive manner in recognition of these topics.

4. Is student participation anonymous?

Survey administration procedures are designed to protect student privacy and allow for anonymous participation. Students submit a completed questionnaire, containing no personal identifiers, sealed with adhesive tabs, which is then submitted to the on-site proctor. Published reports will not include names of participating schools or students.

5. What if schools or students choose not to participate?

Participation is voluntary. However to develop accurate estimates of priority health-risk behaviors among young adults, participation rates must be high. The goal is to achieve 90 to 95 percent participation by selected schools and students.

6. What is the sample size?

1200 students from a stratified random sampling of Oklahoma's 28 institutions of higher learning.

7. How were schools selected?

A stratified random sample of schools has been conducted.

8. How will the survey be conducted at each school?

It is preferable to have a single spokesperson in each school. The spokesperson provides a list of class sections, and ensures a high participation rate.

9. How long does it take to fill out the questionnaire?

One class period is needed for administration of the self-administered questionnaire. It takes approximately 10 minutes for the survey administrator to distribute the survey material and read directions to the students. It then takes approximately 20 minutes for students to record their responses. The questionnaire contains 75 questions. No physical test or exam is involved.

10. When is the survey to be conducted?

Data collection needs to occur during the first two weeks of the Fall, 1992 semester.

11. Where can additional information be obtained?

To obtain additional information about the survey, contact Jan Richter, researcher, at the School of Health, Physical Education, and Leisure at Oklahoma State University, 103 Colvin Center, Stillwater, OK 74078; telephone #: (405) 744-5493 or 744-9321.

Instructions to the Cooperating Instructor

1. This survey should take approximately 30 minutes to complete by the student. This time block includes verbal directions given by you, the instructor, to the students.
2. Students may use pen or pencil.
3. Upon completing the survey instruct the students to seal their booklet with the adhesive tab provided. Tell students to note the markings on the survey booklet where the tab is to be adhered. Upon sealing their booklet, the students are to place their completed surveys in the large envelope provided at the instructor's desk.
4. The student who completes his/her survey **LAST** will place their sealed booklet into the envelope and, in front of the instructor and class, will seal the envelope. **PLEASE NOTE: ONLY 30 SURVEYS PER ENVELOPE.** It may be necessary to have 2 or more envelopes available with more than one student to seal them based upon class size.
5. Inform the students these sealed envelopes will be placed into a larger envelope that are addressed with postage intact to the researcher at Oklahoma State University at Stillwater.
6. Emphasize to students that their truthfulness and candor are essential if changes are to be effected in health education programs and policies relating to Oklahoma's adolescents and young adults. Assure students that their anonymity is secure.
7. Instruct students to begin by reading the cover page of their survey booklet and then respond to screen questions A and B contained on the cover page.
8. **NOTE:** Some students will be instructed via screen questions A and B **NOT** to continue with the survey. Direct these students to raise the booklet up in their hand for you, the instructor to collect. (Place these unanswered booklets into the envelope provided. Include these in your count of 30 per envelope.)
9. Return these sealed envelopes to the contact representative on your campus.

**YOUR TIME AND ASSISTANCE IS GRATEFULLY
ACKNOWLEDGED AND APPRECIATED**

On-Site Contact Representative: Mission

1. Acknowledge the necessity of student anonymity.
2. Select the required general education classes most representative of true, first time freshmen at your institution.
3. Recognize that the survey must be given within the first 2 weeks of the Fall semester before students receive college level HIV/AIDS education.
4. Engage the cooperation of the instructors of those selected general education classes within your institution.
5. Act as the on-site contact person at your institution for the cooperating instructors.
6. Collect the completed surveys either personally or via campus mail from the cooperating instructors.
7. Mail the completed surveys in the self addressed, stamped envelopes provided, to the researcher at Oklahoma State University.

On-Site Contact Representative: Materials for Distribution

Self addressed, stamped envelopes to be retained by the on-site representative for the final mailing of completed surveys to Oklahoma State University.

Survey booklets for the cooperating instructor and his/her student participants.

Packets for Cooperating Instructor: (Contents)

- 1) A written solicitation to the cooperating instructor addressed, "Dear Colleague".
- 2) F. Y. I. form providing additional information about the study being administered.
- 3) Instructions for administering survey.

APPENDIX E

PUBLIC SCHOOLS REPRESENTED

BY THE SUBJECTS

**SCHOOL DISTRICTS WITH 5 OR MORE
SUBJECTS IN STUDY
(in descending order)**

<u>District</u>	<u>Count</u>	<u>Percent</u>
Tulsa	70	16.4%
Broken Arrow	32	7.5%
Oklahoma City	25	5.9%
Choctaw	17	4.0%
Midwest City	15	3.5%
Stillwater	12	2.8%
Enid	11	2.6%
Del City	10	2.3%
Norman	10	2.3%
Edmond	9	2.1%
Moore	9	2.1%
Ada	8	1.9%
El Reno	7	1.6%
Jenks	6	1.4%
Sulphur	5	1.2%
Subtotal	246	57.6%

SCHOOL DISTRICTS WITH 4 OR LESS
SUBJECTS IN STUDY
(in alphabetical order)

<u>District</u>	<u>Count</u>	<u>Percent</u>
Altus	1	0.2%
Alva	4	0.9%
Anadarko	1	0.2%
Antlers	1	0.2%
Ardmore	2	0.5%
Asher	1	0.2%
Atoka	2	0.5%
Bartlesville	3	0.7%
Bethany	2	0.5%
Bethel	1	0.2%
Bixby	4	0.9%
Blackwell	3	0.7%
Bowlegs	1	0.2%
Burns Flat	3	0.7%
Byng	2	0.5%
Carter	2	0.5%
Catoosa	4	0.9%
Chelsea	3	0.7%
Chickasha	2	0.5%
Claremore	3	0.7%
Clinton	1	0.2%
Colbert	1	0.2%
Coleman	3	0.7%
Collinsville	1	0.2%

Coweta	3	0.7%
Coyle	1	0.2%
Cushing	2	0.5%
Dale	1	0.2%
Davenport	1	0.2%
Davis	2	0.5%
Dickson	1	0.2%
Doyle	1	0.2%
Elk City	2	0.5%
Empire	1	0.2%
Fairview	1	0.2%
Fletcher	1	0.2%
Forgan	1	0.2%
Frederick	1	0.2%
Geranimo	1	0.2%
Glenpool	2	0.5%
Guthrie	2	0.5%
Guymon	1	0.2%
Harrah	4	0.9%
Hennessey	1	0.2%
Holdenville	1	0.2%
Hugo	1	0.2%
Jones	2	0.5%
Kellyville	2	0.5%
Kiefer	1	0.2%
Kingfisher	1	0.2%
Konawa	1	0.2%
Laverne	1	0.2%
Lawton	3	0.7%
Lexington	2	0.5%
Liberty Moun	1	0.2%
Lone Wolf	1	0.2%
Macomb	1	0.2%
Madill	2	0.5%

Marlow	1	0.2%
McLoud	1	0.2%
Milburn	1	0.2%
Millwood	1	0.2%
Mooreland	2	0.5%
Morrison	1	0.2%
Mounds	1	0.2%
Muskogee	4	0.9%
Mustang	2	0.5%
Okeene	1	0.2%
Noble	2	0.5%
Newcastle	1	0.2%
Newkirk	1	0.2%
Okmulgee	1	0.2%
Oney	1	0.2%
Oologah	1	0.2%
Owasso	3	0.7%
Pauls Valley	4	0.9%
Pawnee	1	0.2%
Perry	1	0.2%
Piedmont	1	0.2%
Ponca City	1	0.2%
Porter	2	0.5%
Poteau	1	0.2%
Pryor	1	0.2%
Purcell	1	0.2%
Putnum North	1	0.2%
Ripley	3	0.7%
Salina	1	0.2%
Sallisaw	4	0.9%
Sand Springs	4	0.9%
Sweetwater	1	0.2%
Tahlequah	2	0.5%
Tecumseh	2	0.5%

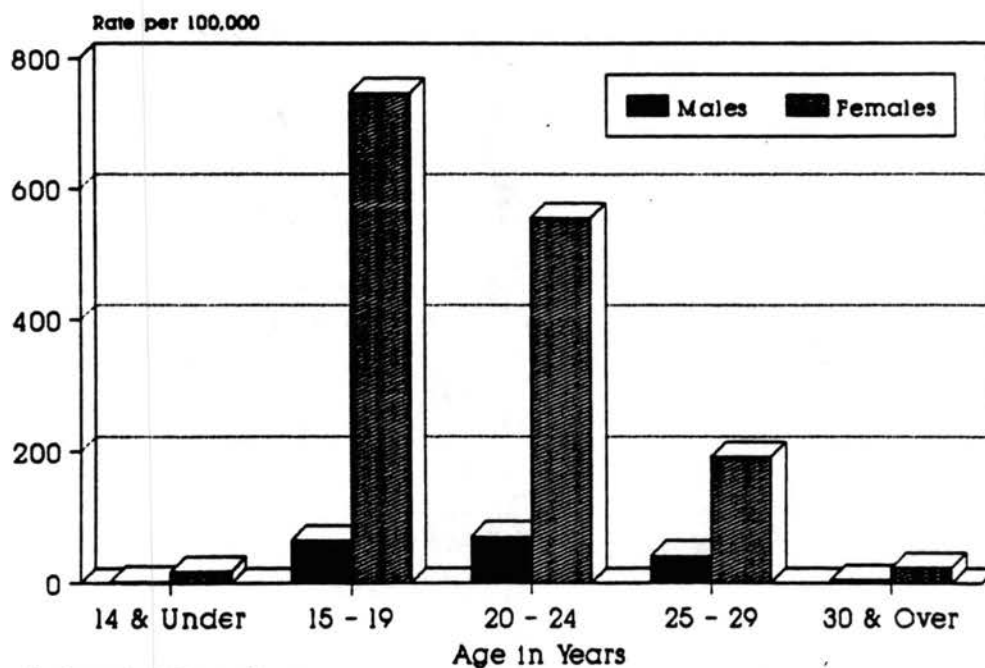
Texhoma	1	0.2%
Shawnee	4	0.9%
Sapulpa	4	0.9%
Sayre	2	0.5%
Tishomingo	1	0.2%
Vian	2	0.5%
Walters	1	0.2%
Watonga	1	0.2%
Waukomis	1	0.2%
Wilburton	1	0.2%
Woodward	2	0.5%
Wyandotte	2	0.5%
Yukon	2	0.5%

Subtotal	181	42.4%
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APPENDIX F

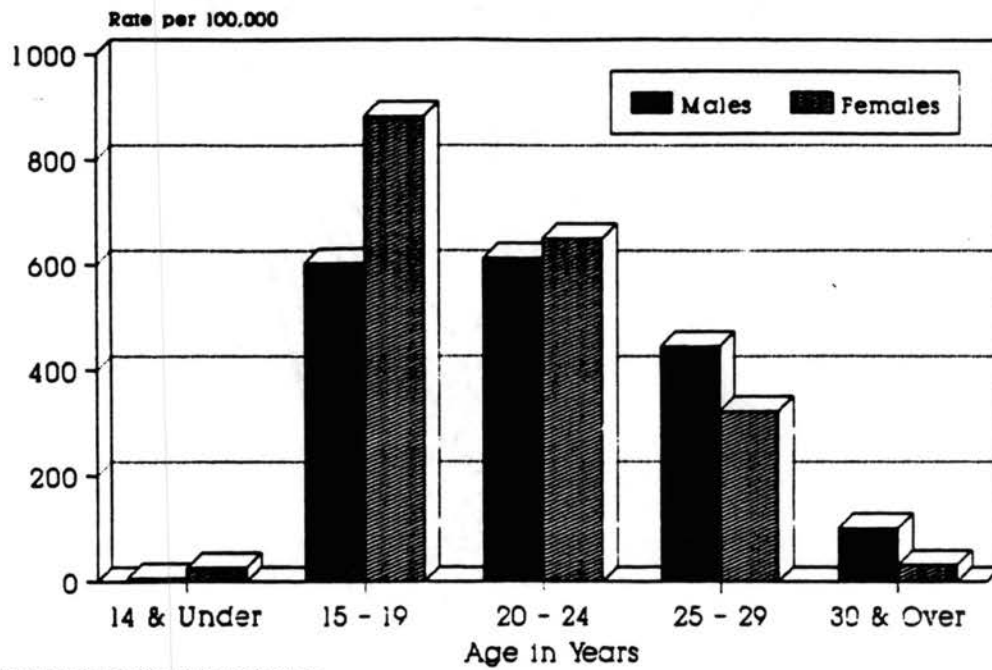
**INCIDENCE OF SEXUALLY TRANSMITTED
DISEASES BY AGE IN OKLAHOMA**

CHLAMYDIA CASE RATES BY AGE & SEX Oklahoma

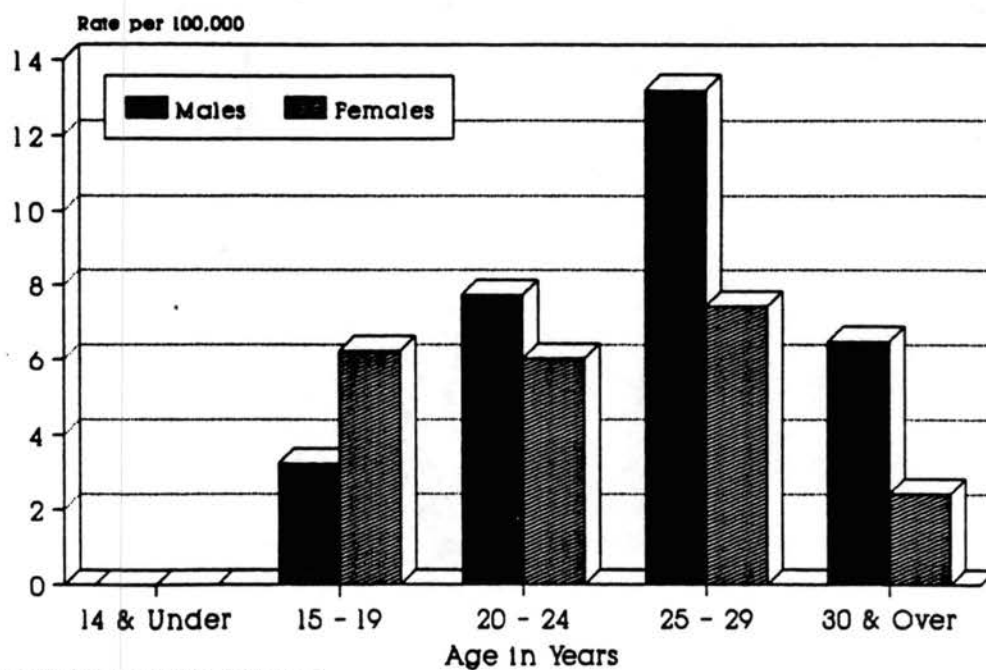


Sexually Transmitted Disease Division
Oklahoma State Department of Health

GONORRHEA CASE RATES BY AGE & SEX Oklahoma



P & S SYPHILIS CASE RATES BY AGE & SEX Oklahoma

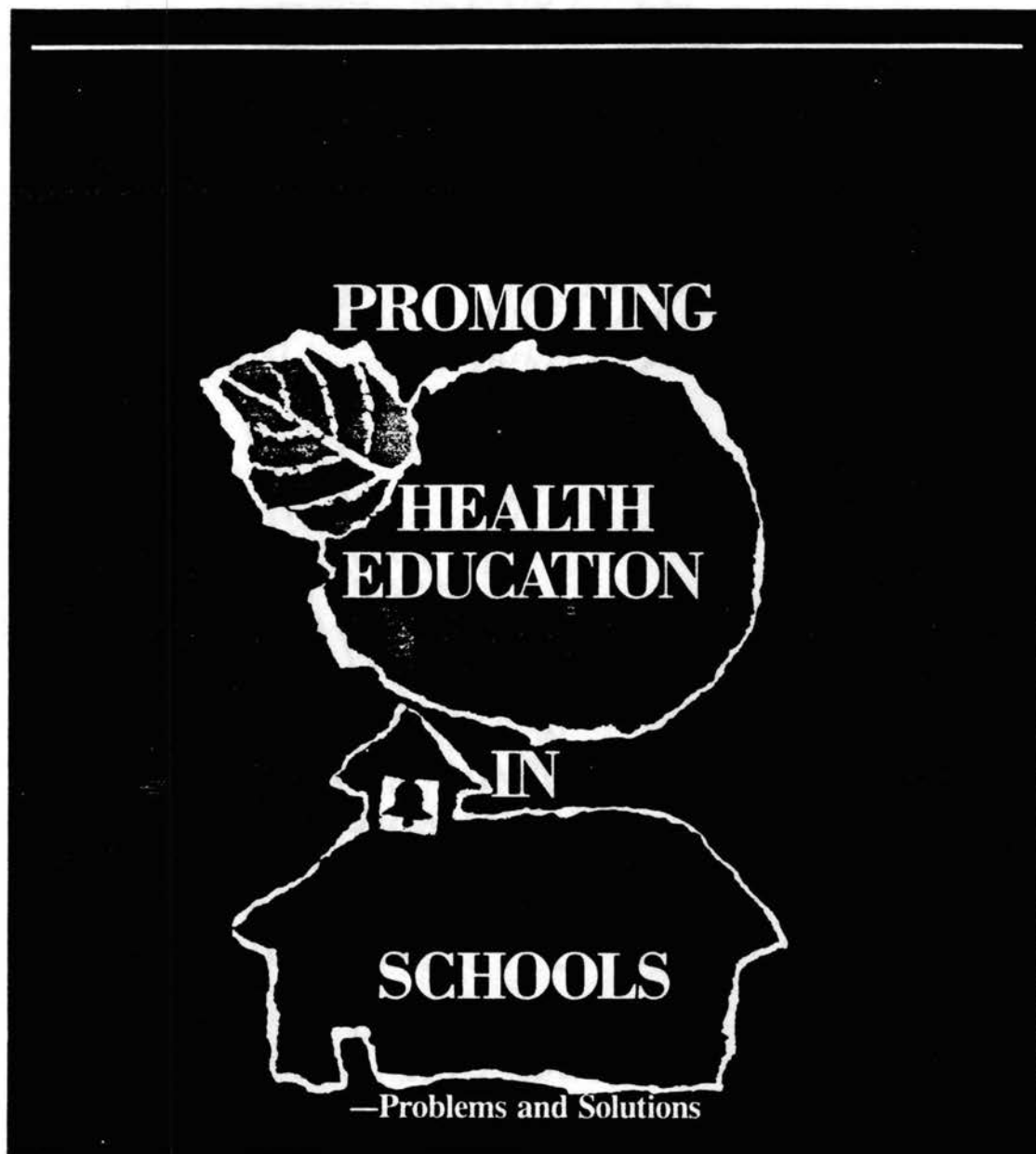


Sexually Transmitted Disease Division
Oklahoma State Department of Health

APPENDIX G

**NATIONAL POSITION STATEMENTS ON
COMPREHENSIVE HEALTH EDUCATION**

AASA



American Association of School Administrators

Prelude

Juvenal said it—John Locke repeated it—And for centuries before and after educators have pursued the goal of *mens sana in corpore sano*—Here we go again

Orandum est ut sit mens sana in corpore sano. (We should pray for a sound mind in a sound body.)

—Juvenal (c. 100 A.D.)

A sound mind in a sound body is a short but full description of a happy state in this world.

—John Locke (1693)

Strengthen the body before exercising the mind.

—Jean Jacques Rousseau (1762)

Concepts for health education-1776: Calamities, fluxes and fevers, spirits and other potions, victuals.

—Anne E. and Bette Keyser, in *Health Education Forces and Factors Evolving Concepts* (1976)

Concepts for health education-1865: Anatomy and physiology, mishaps and misfortunes, hygiene, home remedies and patent medicines, alcohol and tobacco, food and drink.

—*Health Education: A Conceptual Approach to Curriculum Design* (1976)

Make health an aim.

—John Dewey (1916)

The education and care of tubercular children and children of low physical vitality, while valuable, is but a small part of the health problem which a modern school system has within

recent years been called upon to face. The discovery and isolation of bacteria; the vast amount of new knowledge which has come to us as to the transmission and possibilities for the elimination of many diseases; the spread of information as to sanitary science and preventive medicine; the change in emphasis in medical practice from curative to preventive and remedial . . . have all alike combined with modern humanitarianism and applied Christianity to make us take a new interest in child health.

—Ellwood P. Cubberley (1917)

To discharge the duties of life and to benefit from leisure, one must have good health. The health of the individual is essential also to the vitality of the race and to the defense of the Nation. Health education is therefore fundamental. . . . The commission therefore places health first with regards to the main objectives of education: 1. Health. 2. Command of fundamental processes. 3. Worthy home membership. 4. Vocation. 5. Citizenship. 6. Worthy use of leisure. 7. Ethical character.

—*The Cardinal Principles of Secondary Education* (1918)

To aim at health in a vague general way is scarcely to aim at all. We need an itemized statement of the specific habits which condition good health.

—Franklin Bobbitt (1920), as he proceeded to list 48 "health abilities" at which "education might aim"

"Teach Health, Not Disease."

—Title of article in *Health and Physical Education*, May 1941.

Background

Origins of this AASA Critical Issues Report—government officials, health experts, and school administrators agree: there is a new type of health education and promotion—The survey and responses

The call for a review of health education, addressed to school administrators, came most insistently from U.S. public health officials. They saw the mounting statistics on cancer, lung and heart disease, teenage pregnancies, youth stress, and suicide. At the same time they saw the accumulation of medical knowledge that could be used for prevention of sickness, low vitality, and the old and new ravages of body and mind.

It is urgent, these public health officials said, to call for participation of U.S. schools in efforts to apply the new knowledge and to transmit it to students, faculty, and families of the nation.

Health educators agreed but took pains to stress that there are also new ways to educate for health. They had seen some of the old ways fail—although there were still some indispensable ingredients in the traditional ways the schools go about to promote student health.

When the American Association of School Administrators accepted the call for developing a new report on health education, a first question to arise was: What are the characteristics of this new type of health education? Health specialists immediately stressed that it was not only a question of health *education* but health *promotion*. By this they meant the schools must not only teach, but also be advocates of health. They must demonstrate through staff behavior, through a safe school environment, through involving parents and the public, that health is desirable and possible for all.

Fourteen Points of Difference

Some of the traditional elements of health education are still with us in many districts, and some are good and indispensable, including such valuable work as early emphasis on dental care and efforts to identify children with poor vision, hearing problems, and malnutrition. At the same time, the new health curriculum is pushing for recognition.

The movement is from the old to the new, and the differences between the two are becoming sharply apparent. Here are 14 points of difference:

The Traditional School Health Program

1. Concentrated on student acquisition of facts about the body—its anatomy and physiology

2. Saw the school and the classroom as the beginning and end of all health education

3. Placed main responsibility for health instruction on the classroom teacher or school nurse

4. Used textbook as main source of information

5. Paid little attention to coordination and comprehensiveness in health instruction. Curricula spotty; offerings often uneven

6. Made little use of community resources

7. Lacked the characteristics of a challenging subject or discipline; often regarded by upper grade students as a snap course

8. Concentrated on personal hygiene—to the exclusion of much else

The Emerging, New-Style School Health Program

Concentrates on inculcating habits and practices of healthful living; focuses on changing behavior

Takes the classroom to the community and the community into the classroom

Seeks participation of doctors, health specialists, experts, and medical technicians as helpers to teachers in the instructional process

Supplements textbooks with a wide range of instructional materials in print and technology

Seeks and develops comprehensive K-8 and 9-12 health curricula

Makes contacts with hospitals, clinics, food establishments, police, fire protection, highway safety, and sanitation facilities

Infuses courses of study with elements from biology, chemistry, nutrition, physiology, anatomy, human development, psychology, and other basic sciences

Personal hygiene, yes. But prepares students also to be concerned about a safe and healthy community and to become wise consumers of health services

The Traditional School Health Program	The Emerging, New-Style School Health Program
9. Seldom used materials and resources of heart, lung, cancer, and other professional associations	Seeks out and uses the rich reservoirs of materials and other resources from health and medically oriented professional organizations
10. Saw little relationship between bodily health and scholastic achievement	Takes note of the mental vigor stemming from proper nutrition, rest, and exercise
11. Encouraged minimal parental involvement in promoting health of students	Parents are recognized as potent partners in the promotion efforts for healthy students
12. Often failed to recognize importance of adults—teachers, principals, parents—as role models; and of the influence of adult behavior on student health practices	Considers adult role models as a crucial ingredient in health promotion
13. Largely ignored health conditions and behavior of teachers and other school staff. Health education was mainly for students	Promotes staff wellness programs that, for example, seek elimination of smoking among faculty, promote bodily vigor, and inculcate proper eating habits
14. Failed to perceive the school environment as a factor in health education and as affecting student and staff health	Buildings and school grounds are kept clean and safe, free of toxic agents, as one means to promote health of students and staff

NATIONAL PTA^c
 700 NORTH RUSH STREET
 CHICAGO, ILLINOIS 60611-2671
 312.787.0977
 Fax: 312.787.8342

POSITION STATEMENT

(Adopted by the 1992 Board of Directors)

COMPREHENSIVE SCHOOL HEALTH PROGRAMS

National PTA believes that health is based on the quality of life of the whole child - emotional, intellectual, physical, social and spiritual. All elements must be considered before optimum health can exist.

National PTA recognizes that:

- * Social changes have produced major health problems among our children that have directly impacted on school and their ability to educate;
- * academic achievement and student self-esteem and well-being are inextricably intertwined;
- * responsibility for the emotional, intellectual, physical and social health of children is that of the whole community and of all its institutions; and
- * that, after the home, the school is often best positioned to serve as the community's center for meeting the needs of the whole child.

National PTA believes that a comprehensive school health program, encompassing health education, health services and healthy school environment includes the following components:

Philosophy and goals established by local school boards in partnership with parents, students, educators, community health care providers and others, and includes the development, implementation and evaluation of a comprehensive school health program.

Health services that appropriately reflect the educational and community commitment to address identified health problems that limit students abilities to learn.

Health curriculum that is comprehensive sequentially developed, age and culturally appropriate, reflects current health issues of the community, and is taught by educators qualified to present health instruction. The curriculum and instruction program

should include the following content areas: accident prevention and safety, nutrition, community health, personal health, consumer health, environmental health, substance use and abuse, family life education, mental and emotional health and prevention and control of disease.

Healthy school environment that demonstrate care for physical facilities, stress the importance of positive mental health and emotional climates within the school setting, and ensure the physical safety of the students and staff.

Integrated school and community health promotion efforts that acknowledge the shared responsibility for student health with the home, public and private health care systems, law enforcement and justice systems, government, environmental agencies, business, religious organizations, civic groups and the media.

Physical education programs that promote lifelong physical activities and fitness, higher order cognitive and affective objectives, and health-related fitness testing.

Food service programs that reflect the ethnic and cultural diversity of students and staff, encourage and promote the health and well-being of students through the serving of nutritionally adequate quality meals, and provide a program of nutrition education.

School counselors who work with students, families and school personnel in the areas of emotional, mental and social growth and development; and collaborate with community professionals in order to serve the whole child.

School nurses who serve as the primary health care provider for students in the school setting and a source of information and support for students, families and staff within the school community.

School-site health promotion programs for faculty and staff that include wellness components which will increase job satisfaction, morale and a healthy quality of life.

National PTA believes that comprehensive school health programs are an essential link in the health education/health care chain.

In order to fulfill the responsibility of offering educational opportunity to all children, we need to recognize and deal with their health needs as they impact on our schools.

Therefore, schools must form partnerships with parents and the community in order to provide effective, comprehensive school health programs.

NATIONAL PTA[®]
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POSITION STATEMENT

(Adopted by the 1991 Board of Directors)

HIV INFECTION AND AIDS: EDUCATION AND POLICY

National PTA has long supported "the inclusion of various health topics in the school curricula. These have included... family life education, health supervision... as well as such specific health subjects as... sex and sexually transmitted diseases including AIDS." Since there is, at present, no effective vaccine to prevent infection with HIV and no cure for AIDS, National PTA believes:

- Cooperation is needed with government agencies and reputable health and education organizations to educate parents, student, educators and the general public about HIV infection and AIDS, including its medical, legal and psychosocial consequences;
- State departments of education and local boards of education (*) should provide all school districts and schools with sufficient resources to offer HIV/AIDS education to students and training for teachers and support staff;
- Schools should provide developmentally appropriate education, within the context of a comprehensive K-12 health education curriculum, to help students avoid infection with HIV;
- Educators should involve parents in decision-making concerning HIV/AIDS curricula;
- PTA members should participate in the development, adoption and ongoing review of HIV/AIDS curricula, including the selection of appropriate teaching materials that promote responsible decision-making, avoidance of illicit drugs, and sexual abstinence. HIV/AIDS curricula should include instruction in specific ways to prevent HIV infection;
- PTAs constituent bodies and individual members should make available accurate and timely information on HIV and AIDS from reputable sources.
- School boards should adopt policies concerning students and staff infected with HIV, and state, region, district, council and local PTAs should be come and remain involved in developing such policies. Since no known cases of AIDS have been attributed to casual contact in the school, day care, foster care, home, or work setting, National PTA discourages all actions that would seek to segregate, persecute or ban from school children or staff

In February, 1989, the National Association of State Boards of Education (NASBE) invited the American Medical Association (AMA) to join with it in calling national attention to dangerous trends in adolescent health and the need to take action to reverse them in order to reduce the spread of HIV and avoid other health problems. In August, 1989, NASBE and AMA officially announced the formation of the National Commission on the Role of the School and the Community in Improving Adolescent Health. Comprised of educators, health professionals, clergy, children's advocates, and business, entertainment, political and civic leaders, its objective was to identify common grounds and institutional opportunities for schools, health service providers, and communities to address the adolescent health crisis.

The Commission's focus was on adolescence, the period of life from puberty to maturity (generally between 10 and 18 years of age) when young people are developing attitudes and behaviors that affect their future health and well-being. In addition, adolescence is a time when risky health behaviors can result in serious consequences such as sexually transmitted disease, pregnancy, addiction, or even death. Yet in spite of the importance of this period, it is the one critical time in a child's development that is now largely ignored in health policy.

The Commission's work was shaped by an invitational conference on adolescent health at the Carter Presidential Center, by field visits to the state of Vermont and Dade County, Florida, feedback on Commission thinking from some 300 individuals knowledgeable about adolescent health and public policy, by a national meeting of state officials in Michigan, and by conversations with written responses from young people themselves.

Commission members quickly discovered that they could not rely on narrow, conventional definitions of health and education — indeed they found that these definitions overlapped. Effective education requires attention to the physical, social, and emotional health needs of young people. Effective health services require education and counseling services which address attitudes and behaviors. Similarly, they were compelled to examine in depth the important roles of families, physicians, public health and school nurses, counselors, teachers, and others in providing education and services.

NASBE and AMA believe that the Commission's CODE BLUE report should be the basis for a national dialogue on how we as Americans can meet the current crisis in adolescent health. In this regard, each organization is taking the report to its respective policymaking body for adoption, and implementation.

How did this come about? While the causes are complex, a central factor is the deep changes in our society, neighborhoods, and families that have left many children on their own and more isolated from adults. The mobility of American families, the need for second incomes, a faster-paced society, and increases in poverty have stretched many families to the limit, and in the process have robbed too many young people of stable families and communities where they are surrounded by caring adults to guide their growth and development.

The good news is that we have powerful solutions to this crisis at hand. Over the last twenty years in particular, we have learned which kinds of programs and strategies can make a difference in young people's lives. This Commission believes we can reverse the spiral of decline, and calls upon this nation to:

- **Guarantee all adolescents access to health services regardless of ability to pay.** These services include family and psycho-social services offered by a variety of professionals and non-professionals, as well as medical services. They should be convenient, confidential, comprehensive, and age-appropriate. Achieving this will require significant changes in the national health care system for children and adolescents, including major changes in public and private health insurance. It will also require the expansion of direct services, paying particular attention to increasing public health and school health services, and establishing adolescent health centers.
 - **Make communities the front line in the battle for adolescent health.** The fundamental responsibility for organizing adolescent health services should lie with local governments, school boards, and local public health agencies. In every community in this country, they should form powerful local coordinating councils for children, youth, and families to: (a) develop local solutions to local problems, and (b) help local residents transform their neighborhoods into caring communities. Radical changes in federal and state policies, programs, and operations are necessary to support these councils.
 - **Organize services around people, not people around services.** Administrative convenience must no longer govern service delivery. Health, social service, and education providers must modify "business as usual" to collaboratively meet the needs of individual adolescents and their families. This will require training service providers to work effectively with adolescents and to work collaboratively. Improving the life prospects of poor and minority populations will require special actions, including preparing more educators and health professionals to operate effectively in low income communities. It will also require the creation of a Neighborhood Health Corps of paid, non-professional health workers to help adolescents and their families actually use health and other services to improve their life prospects.
 - **Urge schools to play a stronger role in improving adolescent health.** Schools should recognize that they can only accomplish their education mission if they attend to students' emotional, social, and physical needs. Schools should become far more personal institutions and more positive learning environments that engage adolescents' interest and motivate them to achieve their potential. They should offer students a new type of health education that provides honest, relevant information and teaches skills and strategies to
-



EXECUTIVE SUMMARY

This Commission is issuing a CODE BLUE, and calls upon the nation to collectively demonstrate the political will to respond. CODE BLUE is the phrase used by hospitals to signal a life-threatening emergency and set in motion a number of extraordinary actions to save a patient's life. The emergency we are facing is an unprecedented adolescent health crisis — one that has serious repercussions for our economy and social well-being. For the first time in the history of this country, young people are *less* healthy and *less* prepared to take their places in society than were their parents. And this is happening at a time when our society is more complex, more challenging, and more competitive than ever before.

Unhealthy teenagers — those who are alienated or depressed, who feel that nobody cares, who are distracted by family or emotional problems, who are drinking or using drugs, who are sick or hungry or abused or feel they have no chance to succeed in this world — are unlikely to attain the high levels of education achievement required for success in the 21st century. And thousands of these young people will experience school failure, which for many will be a precursor to an adult life of crime, unemployment, or welfare dependency.

Yet today Americans are largely unaware of the extent of the adolescent health problem. Most know that in some neighborhoods teen pregnancy and drug use are at epidemic proportions, and some understand that AIDS cases and HIV infection rates among adolescents are growing at a frightening pace. But what they don't know is that adolescents in every neighborhood are displaying serious health problems. Consider that:

- In every neighborhood, we are seeing significant numbers of young people with serious social and emotional problems, the consequences of which range from high suicide attempt rates (10 percent of boys and 18 percent of girls) to depression and alienation resulting in anti-social behavior, poor school performance, and dropout.
 - Adolescents are using dangerous substances for relief of stress and for entertainment. Alcohol consumption is high, with 39 percent of high school seniors reporting getting drunk within the past two weeks; and at the same time, over 3.5 million 12 – 17-year-olds have tried marijuana, with one third being regular users.
 - Violence pervades not only media and entertainment, but many young people's daily lives. Every day 135,000 American students bring guns to school, and homicide is the leading cause of death among 15 – 19-year-old blacks.
 - Sexual activity is occurring at younger and younger ages, resulting in more than 1 million adolescents getting pregnant every year (nearly one in every ten) and an epidemic of sexually transmitted diseases, one of which (HIV/AIDS) has no cure.
 - Many thousands of young people leave school every year with skills that make them only marginally employable, constituting a major threat to our nation's productivity and competitiveness. One reason for this is the large numbers of students with emotional, social, and physical health problems that interfere with their learning.
-



make wise decisions and develop positive values. They should assure schools are smoke free, drug free, and violence free, and promote the emotional and physical wellness of students and staff. They should make arrangements for students to receive needed services, increasing their own service capacity and establishing collaborative relationships with external agencies.

The Commission calls upon this nation to recognize that adolescents will not achieve their potential if they have social, emotional, and physical health problems that interfere with their learning — and that they will cost society millions of dollars in medical and social costs if they continue to engage in health-risking behaviors. But recognizing the problem is not enough. Solutions will require a commitment of public and private dollars, and of time and energy from individual Americans and many organizations and groups that work with teens. Yet it is time to be frank: the future is bleak if we do not invest more in our nation's greatest resource — our young people.

Meeting these challenges is the only wise course towards securing the future of the nation. But more than that, it is the right and moral thing to do for our young people, and we must accept nothing less.

CONVENTION REPORT 1992

**DAILY SUMMARIES, SPEECHES, OFFICIAL TALLY OF VOTES,
RESOLUTIONS AND CONSTITUTIONAL AMENDMENTS
ADOPTED AT THE SEVENTY-SECOND CONVENTION
OF THE AMERICAN FEDERATION OF TEACHERS, AFL-CIO
LAWRENCE CONVENTION CENTER
PITTSBURGH, PA., AUGUST 12-16, 1992**

WHEREAS, an estimated 20 percent of school-age children and 23 percent of preschoolers live in poverty, and 15 percent of all school-age children have no health insurance coverage whatsoever; and

WHEREAS, despite the fact that the leading threats to children's health involve behavioral choices and, therefore, may be prevented through education, intervention and the timely provision of direct services, the National School Boards Association estimates that as few as 5 percent of this nation's schools provide comprehensive school health programs, and the Carnegie Council on Adolescent Development concludes that throughout the United States there exist fewer than 330 school-linked or school-based clinics serving less than 1 percent of all adolescents; and

WHEREAS, these threats to the health of children adversely affect their attendance at school, their readiness to learn and their capacity to grow and thrive and become healthy, productive and contributing adults:

RESOLVED, that the AFT encourage and support federal legislation to expand and fund comprehensive school health programs that provide health education and direct services to promote good health and prevent HIV, AIDS, sexually transmitted diseases, drug, alcohol and tobacco use, violence, and other life-threatening and risky behaviors; and

RESOLVED, that the AFT support federal legislation to expand and fund school-based and school-linked mental health and counseling services, health screening, immunization programs, parent skill instruction, crisis intervention, child care and health and social support programs; and

RESOLVED, that AFT reaffirm the role of the school nurse in the planning and delivery of any school-based health care and acknowledge that the presence of any additional services at the school site should not be interpreted to diminish or eliminate the role of the nurse within the school or as liaison to other health care providers; and

RESOLVED, that AFT continue to provide leadership in efforts to remove economic barriers to medical access for all children, including the expansion of Medicaid and other federal programs to finance direct services provided in school-based and school-linked clinics, as well as the enactment of universal health coverage for all Americans. (1992)

CHILDHOOD IMMUNIZATIONS

WHEREAS, the incidence of some preventable childhood diseases has risen dramatically in recent years. A case in point is measles. Reported cases of measles in 1989 increased 423 percent from 1988 figures with 41 measles-associated deaths reported in that year. The incidence of measles continues to climb; and

WHEREAS, the outbreak of many childhood diseases occurs among unvaccinated children in large urban areas; and

WHEREAS, large numbers of children go unvaccinated because of critical gaps in health care and/or lack of access to health care; and

WHEREAS, the federal government has failed to guarantee the availability of measles vaccine to large community clinics; and

WHEREAS, large numbers of recently arrived immigrant children are at high risk of hepatitis B:

RESOLVED, that the Congress appropriate adequate funding to guarantee that all children be vaccinated according to the latest guidelines of the Advisory Committee of Immunization Practices (ACIP); and

RESOLVED, that the federal government through the Centers for Disease Control and the Food and Drug Administration ensure that adequate supplies of vaccine be available at all times; and

RESOLVED, that during outbreaks, unimmunized employees of schools, public institutions and health care facilities be offered voluntary screening and immunization programs. (1992)

INDOOR AIR QUALITY

WHEREAS, poor indoor air quality in school facilities threatens the health and well-being of students and all school employees; and

WHEREAS, inadequate ventilation in public office buildings and facilities and health care institutions is associated with a growing epidemic of sick building syndrome and other building-related illnesses; and

WHEREAS, this situation affects all public employees who work in such buildings as well as the public at large who use such buildings:

RESOLVED, that the AFT urge Congress to enact legislation that would mandate promulgation of: (1) minimum ventilation standards for schools and public buildings and (2) an OSHA indoor air quality standard and that would appropriate funds (grants) to schools and public agencies to evaluate ventilation systems and repair them to meet minimum standards. (1992)

HEALTH AND SAFETY FOR PUBLIC EMPLOYEES

WHEREAS, those engaged in public employment face a wide variety of occupational safety and health hazards that include the newly recognized hazards of assault and violence at work, blood-borne infectious diseases such as AIDS and hepatitis B, exposure to toxic chemical spills, occupational stress, asbestos in buildings, indoor air pollution, computer terminals (VDTs); and

COMPREHENSIVE SCHOOL HEALTH PROGRAMS

WHEREAS, recent findings of the National Commission on the Role of the School and the Community in Improving Adolescent Health, the Carnegie Council on Adolescent Development, the National Commission on Children and others have concluded that American children face unprecedented risks to their personal safety and health; and

WHEREAS, the major threats to the health of American children involve behavior choices, environmental, social and economic circumstances and, therefore, may be preventable through timely intervention and medical attention; and

WHEREAS, one in ten—more than 1 million—American teenage girls becomes pregnant each year, double the rate of any other industrialized nation; and

WHEREAS, the Centers for Disease Control estimates a three-fold increase in the rate of sexually transmitted disease among teenagers over the past three decades; and

WHEREAS, according to the American Medical Association, adolescents are sexually active at younger ages, so that 17 percent of girls and 29 percent of boys have had sexual intercourse by age 16; and

WHEREAS, young adults account for 20 percent of all people with AIDS, indicating that many, if not most, had contracted the virus while still in their teens; and

WHEREAS, alcohol-related automobile accidents are the leading cause of death among all adolescents, killing 10 teenagers every day; and

WHEREAS, drug and tobacco use by children remains at dangerously high levels; and

WHEREAS, school-age children face threats of serious violence in their daily lives, as an estimated 135,000 American students bring guns to school on any given day, and at 40 deaths per 100,000, homicide is the leading cause of death among minority youth in the 15- to 19-year-old age group; and

WHEREAS, every year 2 million new cases of child abuse are reported to authorities; and

WHEREAS, suicide is the second most frequent cause of death among teenagers, with one in 10 boys and nearly one in five girls having made at least one attempt to take their own lives; and

WHEREAS, mental disorders are the major cause of disability among teenagers; and



ISSUE BRIEF NUMBER 2ISSUE BRIEF NUMBER 2***ISSUE BRIEF NUMBER 2***

The U.S. Department of Health and Human Services in *Healthy People 2000* has set as a goal for the year 2000 to provide quality K-12 school health education in at least 75% of schools. Does your school district have a Comprehensive School Health Program In Place?

The Call For Comprehensive School Health Programs

As elected policymakers and educational leaders governing public education in our nation's schools, local school boards and school administrators, with the cooperation and support of other public and community agencies, must assume extended responsibility for the health and well-being of the children by ensuring that programs and services exist that enable our children to clearly recognize healthy versus unhealthy behaviors and high-risk activities and to make informed decisions which promote healthy life styles and prevent disease. Changing demographics--increased poverty, changed family structures, rising violence and crime--and shifts in behavior related health concerns and in health care are all contributing to this call to school leader action.

One way to meet this challenge is through comprehensive health education programs--including health instruction and health services--that are promoted and supported by school and community leaders and made available in a "healthy" school environment. It is estimated, however, that as few as 5% of our nation's schools currently provide a comprehensive program.

While every school district provides some components of a health program, chances are your program falls somewhere short of comprehensive. NSBA's School Leader's Guidebook describes the components of a comprehensive school program as:

SCHOOL HEALTH PROGRAM PHILOSOPHIES AND GOALS/POLICIES

A school board's philosophy statement should:

- Express the board's support for and commitment to a comprehensive approach to school health;
- Set the stage for planning on the part of the administration;
- Provide a clear direction that gains support from parents and the general community.

A school board's goals should:

- Define the needs and desires of the community;
- Determine what should be taught by and result from health education;

A school board's policy should:

- Provide support to both staff and students which leads to attainment of program goals and healthy futures.

SCHOOL HEALTH INSTRUCTION

Health Instruction goals should:

- Provide students with the knowledge and skill that enable them to adopt and maintain healthy attitudes and behaviors throughout their lives;
- Be delivered through a planned sequential health instructional curriculum for grades K through 12 that reflect current health issues focusing on the special needs of the local community;
- Be designed and implemented with the help of teachers and health services staff;
- Provide appropriate inservice training to provide teachers and other staff members with the information and strategies needed for teaching and supporting the curriculum.

The physical and mental well-being of students is a prerequisite for achieving our educational objectives. William Honig, California Superintendent of Public Instruction

SCHOOL HEALTH SERVICES

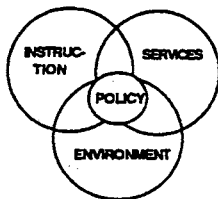
Health Services goals should:

- Establish appropriate school-based and referral health services to address the identified health problems that limit student abilities to learn;
- Involve health services personnel in program development and training;
- Offer a way to coordinate school-based and community health services;
- Offer an opportunity for health service personnel to be involved in instruction, promotion and provision of a healthy school environment.

HEALTHY SCHOOL ENVIRONMENT

Healthy School Environment goals should:

- Provide for the care and upkeep of physical facilities;
- Stress the importance of positive mental health and emotional climates within the school setting;
- Ensure the physical safety of students and staff;
- Provide for nutrition-based directed food service;
- Develop positive interpersonal relationships among staff members and between staff and students;
- Provide an employee wellness component for staff.



SAMPLE POLICY

The primary function of a school is to provide students with the learning experience necessary toward development of their maximum intellectual capacity. The success of the process is limited by the child's emotional, social, and physical health. For this reason the purpose of a comprehensive health education program is twofold: First, to consider the total human being in the educational process, and second, to motivate students to help themselves and others to live healthy, productive lives.
Parkway School District, Chesterfield, Missouri.

For more information contact:

Betty S. Poehman
National School Boards Association
1680 Duke Street
Alexandria, VA 22314
(703) 838-6717

Or stop by NSBA's Comprehensive School Health Program's Exhibit at the NSBA Exposition in Orlando, FL -- April 25-27, Booth #425, to assess the condition of your school's health program.

APPENDIX H

**ADJUSTED OKLAHOMA HIGH SCHOOL
DROPOUT RATES BY COUNTIES**

**State of Oklahoma
1991-92
DROPOUT REPORT**

Office of Accountability
Tom White, Director
Frank Raia, Assistant Director
Robert Buswell, Coordinator
Alice Loftin, Coordinator
Linda Hicks, Executive Secretary

Prepared in Cooperation With:
Data/Research Services
Oklahoma State Department of Education
Patricia High, Director
Dawn Williams, Data Processing Branch Manager

Education Oversight Board Members
James B. Ellis, Chair
Grant C. Hall, Vice-Chair
Karen Yarbrough
Senator Bernice Shedrick
Representative Carolyn Thompson

SANDY GARRETT
Secretary of Education

This publication, printed by the State Department of Education Printing Service, is Department of Education as authorized by Sandy Garrett, State Superintendent of Public Instruction. One hundred copies have been prepared at a cost of \$988.80. Copies have been distributed to the Clearinghouse of the Oklahoma Department of Libraries. OCTOBER 1992.

OKLAHOMA DROPOUT RATES - 1991-92: STATE SUMMARY
TOTAL DROPOUTS REPORTED = 8,122 (*UNDUPLICATED COUNT)

VARIABLE	CATEGORY	NUMBER REPORTED	CATEGORY AS % OF TOTAL
Sex	Males	4,459	54.9
	Females	3,663	45.1
Age	Thirteen and under	483	5.9
	Fourteen	476	5.9
	Fifteen	1,064	13.1
	Sixteen	2,072	25.5
	Seventeen	2,453	30.2
	Eighteen and over	1,574	19.4
Race	Indian	1,032	12.7
	Black	963	11.8
	Hispanic	285	3.5
	Asian	47	0.6
	White/Other	5,795	71.4
Grade	Less Than Ninth	1,063	13.1
	Ninth	1,922	23.7
	Tenth	2,091	25.7
	Eleventh	1,700	20.9
	Twelfth	1,346	16.6
Reason for Leaving (As Reported by School Principals)	Did not return following previous year's completion	561	6.9
	Low achievement or scholastic difficulty	542	6.7
	Lack of appropriate curriculum	8	0.1
	Poor relationships with fellow students	28	0.3
	Poor student-staff relationships	13	0.2
	General dislike for school	4,548	56.0
	Left school to accept employment	305	3.8
	Needed at home or economic necessity	240	2.9
	Physical illness or disability	117	1.4
	Marriage	244	3.0
	Pregnancy	252	3.1
	Behavioral problems	415	5.1
	Expulsion	623	7.7
	Religious conflict	9	0.1
Home schooling	217	2.7	

*Students were only counted once, regardless of the number of times reported

APPENDIX I

HOUSE BILL NO. 1476

An Act

ENROLLED HOUSE
BILL NO. 1476

BY: WHITE, HAMILTON (Jeff),
BASTIN, DAVIS (Guy),
HUTCHCROFT, LARASON,
LASSITER, LITTLEFIELD,
THOMPSON, WILLIAMS
(Freddie), HOBSON,
SNIDER, LEWIS, HARRIS
(Robert), GLENN, MORGAN
(Jim), HOLT, VANATTA,
ROSS, ANDERSON and
STOTTMYRE of the HOUSE

and

STIPE, HERBERT, TAYLOR,
BROWN, CAIN, HANEY,
HORNOR, RIGGS and
DICKERSON of the SENATE

AN ACT RELATING TO EDUCATION; MANDATING AIDS
PREVENTION EDUCATION FOR STUDENTS; PROVIDING
PROCEDURES AND REQUIREMENTS FOR SUCH EDUCATION;
PROVIDING FOR CODIFICATION; PROVIDING AN OPERATIVE
DATE; AND DECLARING AN EMERGENCY.

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

SECTION 1. NEW LAW A new section of law to be codified in the Oklahoma Statutes as Section 11-103.3 of Title 70, unless there is created a duplication in numbering, reads as follows:

A. Acquired immune deficiency syndrome (AIDS) prevention education shall be taught in the public schools of this state. AIDS prevention education shall be limited to the discussion of the disease AIDS and its spread and prevention. Students shall receive such education:

1. at the option of the local school district, a minimum of once during the period from grade five through grade six;
2. a minimum of once during the period from grade seven through grade nine; and
3. a minimum of once during the period from grade ten through grade twelve.

B. The State Department of Education shall develop curriculum and materials for AIDS prevention education in conjunction with the State Department of Health. A school district may also develop its own AIDS prevention education curriculum and materials. Any curriculum and materials developed for use in the public schools shall be approved for medical accuracy by the State Department of Health. A school district may use any curriculum and materials which have been developed and approved pursuant to this subsection.

C. School districts shall make the curriculum and materials that will be used to teach AIDS prevention education available for inspection by the parents and guardians of the students that will be involved with the curriculum and materials. Furthermore, the curriculum must be limited in time frame to deal only with factual medical information for AIDS prevention. The school districts, at least one (1) month prior to teaching AIDS prevention education in any classroom, shall conduct for the parents and guardians of the students involved during weekend and evening hours at least one presentation concerning the curriculum and materials that will be used for such education. No student shall be required to participate in AIDS prevention education if a parent or guardian of the student objects in writing to such participation.

D. AIDS prevention education shall specifically teach students that:

1. engaging in homosexual activity, promiscuous sexual activity, intravenous drug use or contact with contaminated blood products is now known to be primarily responsible for contact with the AIDS virus;
2. avoiding the activities specified in paragraph 1 of this subsection is the only method of preventing the spread of the virus;
3. sexual intercourse, with or without condoms, with any person testing positive for human immunodeficiency virus (HIV) antibodies, or any other person infected with HIV, places that individual in a high risk category for developing AIDS.

E. The program of AIDS prevention education shall teach that abstinence from sexual activity is the only certain means for the prevention of the spread or contraction of the AIDS virus through sexual contact. It shall also teach that artificial means of birth control are not a certain means of preventing the spread of the AIDS virus and reliance on such methods puts a person at risk for exposure to the disease.

F. The State Department of Health and the State Department of Education shall update AIDS education curriculum material as newly discovered medical facts make it necessary.

SECTION 2. This act shall become operative July 1, 1987.

SECTION 3. It being immediately necessary for the preservation of the public peace, health and safety, an emergency is hereby declared to exist, by reason whereof this act shall take effect and be in full force from and after its passage and approval.

Passed the House of Representatives the 15th day of April, 1987..

L. Albert
Speaker of the House of Representatives

Passed the Senate the 16th day of April, 1987.

AGING Hub Reed
President of the Senate

OFFICE OF THE GOVERNOR

Received by the Governor this 23rd
day of April, 1987
at 1:10 o'clock P. M.

By: Robert Vernon Roberts

Approved by the Governor of the State of Oklahoma the 24th day of
April, 1987, at 11:31 o'clock P. M.

Henry Bellmon
Governor of the State of Oklahoma.

OFFICE OF THE SECRETARY OF STATE

Received by the Secretary of State this 23rd
day of April, 1987
at 1:42 o'clock P. M.

By: Bette M. Collins

VITA 2

Jan S. Richter

Candidate for the Degree of
Doctor of Education

Thesis: THE RELATIONSHIP OF MANDATED HIV/AIDS EDUCATION IN OKLAHOMA PUBLIC SCHOOLS TO KNOWLEDGE, ATTITUDES, AND BEHAVIORS OF IN-STATE COLLEGE FRESHMEN

Major Field: Higher Education

Biographical:

Personal Data: Born in Long Beach, California, June 22, 1947, the daughter of Robert Edward Richter and Virginia Emery Richter. One son, Bradley Scott and two daughters, Caroline Christine and Nicki Lee.

Education: Graduated from Princess Anne High School, Virginia Beach, Virginia, June, 1965; received Bachelor of Arts degree in Health and Physical Education from the University of North Carolina at Wilmington, August, 1973; received Master of Education degree with major emphasis in Adapted Physical Education from the University of Central Oklahoma, July, 1987; completed requirements for the Doctor of Education degree with major emphasis in Health Education from Oklahoma State University in May, 1993.

Professional Experience: Certified Secondary Teacher from North Carolina; Oklahoma Public School Systems 1973-1988; HIV/AIDS Prevention Education Coordinator in the Oklahoma State Department of Education 1988-1990; Instructor, Oklahoma State University 1990-present.