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AUTHOR Salzman, Stephanie A.; Girvan, James T.
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ABSTRACT

A model for statewide evaluation of Acquired Immune Deficiency Syndrome (AIDS) prevention education program in Idaho secondary schools was developed and implemented. Focus was on gathering the following data: the number of public schools implementing AIDS prevention education programs; the number of public schools where AIDS prevention education is part of a comprehensive health program; the percentage of students who have received AIDS prevention education; levels of AIDS knowledge and attitudes of students in grade 8 and high school; and levels of AIDS knowledge and attitudes of school personnel. The study included five data collection components: (1) a statewide survey of 100 of the 115 Idaho school districts; (2) a survey of 7,776 eighth-graders and senior high school students from 24 Idaho schools; (3) a survey of 32 school administrators, 16 school counselors, and 615 teachers; (4) on-site interviews with administrators, teachers, and school board members from schools in the student and personnel surveys; and (5) an analysis of curriculum materials used by the sample schools in conjunction with HIV/AIDS prevention education. Only 58% of the districts had an approved AIDS prevention education plan; less than half had integrated the information into a comprehensive plan. Surveys indicated that topics related to AIDS prevention were taught less often and later than teachers thought they should be. Findings highlight the progress made in Idaho as well as the need to align the AIDS curriculum policy with classroom practices. Five tables contain study data. (SLD)

Evaluation of AIDS Prevention Education Programs: A Rural Schools Model

Stephanie A. Salzman, Ed.D.

Idaho State University

and

James T. Girvan, Ph.D.

Idaho State University

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Evaluation of AIDS Prevention Education Programs:

A Rural Schools Model

The Acquired Immune Deficiency Syndrome (AIDS) is a life-threatening disease and a major public health issue. According to the United States Surgeon General's Office, by the end of 1991 an estimated 270,000 cases of AIDS will have occurred in the United States with 179,000 deaths within the decade since the disease was first recognized (United States Public Health Service, 1989). As AIDS is a killer and exists in every state, and as the only weapon currently available to fight AIDS is education (Koop, 1988), AIDS prevention education in the schools is a must. In response to this need, the Centers for Disease Control (CDC) made funds available to state agencies for the development and implementation of health education about AIDS for school-based populations.

Beginning in fiscal year 1988, CDC funds were earmarked specifically for cooperative educational agencies from rural states which had a relatively low incidence of AIDS cases. As Idaho is largely a rural state ranking 44th in the nation in the number of reported cases of AIDS, the CDC awarded the Idaho Department of Education approximately $220,000 per year for five years to implement school-based AIDS prevention education. The rationale for the grant program was based on the concern that statistics showing AIDS incidence to be low in rural areas might tend to make rural students feel they are somewhat immune to AIDS.

During the first year of the grant, a state AIDS education consultant was hired, training sessions for teachers and administrators were provided, and a baseline survey of secondary school students' knowledge and attitudes

about AIDS was conducted. Entering the second year of the grant, the Idaho Department of Education contracted with independent evaluators at Idaho State University for assessment of the extent and effectiveness of Idaho AIDS prevention education programs with the intention of conducting annual evaluations to assess continued program growth.

Purpose of Study

The purpose of the present study was to develop and implement a model and accompanying strategies for statewide evaluation of AIDS prevention education programs in Idaho secondary schools. The overall goal of the evaluation project was to gather data relative to the following specific issues: .(1) the number of public schools that have implemented AIDS prevention education programs; (2) the number of public schools where AIDS prevention education is part of a comprehensive health program; (3) the percentage of students who have received AIDS prevention education; (4) levels of AIDS knowledge and attitudes of youth at eighth grade and high school; and (5) levels of AIDS knowledge and attitudes of school personnel.

Method

The model developed for the evaluation of Idaho AIDS prevention education programs consisted of five data collection components: a statewide school district survey, student survey, school personnel survey, on-site interviews, and curriculum materials analysis. All components of the evaluation project were completed during the 1989-1990 academic year.

School District Survey

The sample for the first component of the evaluation project, the statewide school district survey, comprised 100 (87%) of the 115 public school districts in Idaho. A list of districts and contact persons was accessed through the 1989-1990 Idaho Educational Directory compiled by the Division of Finance and Administration, Idaho Department of Education. Preliminary correspondence, sponsored jointly by the Idaho Department of Education and AIDS Education Consultant, solicited district support and provided minimal leverage for participation in the project. The project directors subsequently established contact with each school district explaining the project, its importance, and the purpose and utilization of data. The mailing also included the survey instrument and directions, request for a copy of the district HIV/AIDS education policy, and a stamped/addressed envelope to expedite return.

The survey instrument, developed by the project directors in consultation with Idaho Department of Education staff, requested information about the district's locally developed plan for HIV/AIDS education. In addition, the survey requested information regarding the number of schools that have implemented an HIV/AIDS prevention education curriculum, the number and percentage of students at each grade level receiving HIV/AIDS prevention education, and the number of schools providing HIV/AIDS prevention education within the context of a comprehensive health education program. The survey instrument was composed of closed-ended and likert-type items, allowing for ease of response and coding for statistical analysis.

Student Survey

The sample for the second component of the evaluation project, the student survey consisted of eighth-grade and senior high students enrolled in selected representative Idaho public schools. Schools participating in the student survey were selected using the following stratified cluster sampling procedures. First, the state of Idaho was portioned into four geographic regions: Snake River Valley, Magic Valley, Treasure Valley, and the Palouse region. Distribution of districts and schools within each region were relatively balanced and within acceptable survey guidelines. All junior high/middle and senior high schools were then categorized as small (student population = 250 or less), medium (student population = 251-650), or large (student population = 651 and above) using school enrollment statistics listed in the 1989-1990 Idaho Educational Directory.

Following categorization of schools by size, two schools (one junior high/middle and one senior high) of each size category (i.e., small, medium, and large) were randomly selected using computer randomization procedures from each of the four geographic regions. Thus, the total sample of students (n = 7,776) consisted of all eighth-grade and senior high students enrolled in two small, two medium, and two large schools in the four geographic regions of Idaho (e.g., 12 junior high/middle schools and 12 senior high schools).

Upon completion of the sample selection process, district contact persons or superintendents were contacted through preliminary correspondence, sponsored jointly by the Idaho Department of Education

and AIDS Education Consultant, to solicit district support and participation in the project. Participating schools were subsequently contacted by the project directors to secure approval for on-site data collection and to set dates and times. Data collection visits were scheduled for one or two days, as determined by school size and geographic factors, and coincided with components three and four of the project, school personnel surveys and on-site interviews.

The survey instrument, developed by the project directors in consultation with Department of Education staff, requested information relative to student HIV/AIDS knowledge and attitudes including modes of transmission, AIDS prevention, symptoms and diagnosis, information sources, and interpersonal relationships with HIV-infected individuals. Responses were recorded by students on Scantron sheets to facilitate computer coding and data analysis.

The student survey was administered during regularly scheduled first-period classes by the classroom teachers. Completion of the surveys was coordinated and facilitated by 4-5 people from the 16-member project data collection team composed of representatives from school, community, and university sectors. Responsibilities of the team included consultation during instrument design and sample selection and participation in all facets of data collection including administration of the student and school personnel surveys, on-site interviews, and curriculum materials review and evaluation. Team members were reimbursed for travel expenses and received daily honoraria during the on-site school visits.

School Personnel Survey

The sample for the school personnel survey consisted of the school-level administrators (n = 32), counselors (n = 16), and teachers (n = 615) from the junior high/middle and senior high schools accessed for the student survey component of the evaluation project. The school personnel survey was administered by 4-5 members of the data collection team at specially scheduled faculty meetings convened during school visits coinciding with the student survey and on-site interviews.

The survey instrument, developed by the project directors in consultation with Department of Education Staff, requested information about HIV/AIDS knowledge of school personnel. In addition, the survey requested information regarding school personnel perceptions concerning HIV/AIDS prevention education. The survey instrument was composed of closed-ended and likert-type items, allowing for ease of response and computer coding for statistical analysis.

On-Site Interviews

The sample for the on-site interviews, the fourth component of the evaluation project, consisted of a district-level administrator, school board member, the principal, and the health education teacher(s) from the schools utilized for the student survey and school personnel survey. Through on-site interviews, data were collected to help validate the information supplied by the statewide school district survey. Furthermore, the on-site interviews served the important purpose of actually talking to the individuals involved in using HIV/AIDS prevention education programs.

The interviews were conducted by members of the project data collection team and coincided with components two and three of the project, the student survey and the school personnel survey. Interviews utilized interview protocols developed by the project directors in consultation with Department of Education staff. The interviews focused on the district's locally-developed and implemented HIV/AIDS prevention education program. In addition, actual positives and negatives of the program were discussed and questions and issues were clarified for understanding by both the interviewer and respondent. During the interviews, evidence of program participation (i.e., course syllabi, curricular materials, etc.) were requested and examined by the data collection team.

Curriculum Materials Analyses

The purpose of the last component of the evaluation project was to review and analyze the curriculum materials utilized by the sample schools in conjunction with HIV/AIDS prevention education. The curriculum analyses were completed by members of the project data collection team and coincided with the on-site interview component of the evaluation project. Descriptive data including title, publisher, type of media, target audience, and so forth relative to the curriculum materials were noted. In addition, the curriulum materials were analyzed using the criteria for evaluating programs outlined by the Centers for Disease Control (1988) in its "Guidelines for Effective School Health Education to Prevent the Spread of AIDS."

Results

The five data collection components of the evaluation project (i.e., district survey, student survey, school personnel survey, on-site interviews, and curriculum analyses) yielded information relative to dimensions of AIDS prevention education programs, student and school personnel knowledge and attitudes regarding AIDS and AIDS prevention education, and characteristics of AIDS curriculum and instructional materials.

School District Survey Results

Descriptive statistics relative to each survey item are summarized in Tables 1 and 2. Of the 100 responding districts, only 58% reported that the district has a local school board approved plan regarding the teaching of AIDS prevention. Moreover, less than half of the responding districts said they have integrated AIDS education into a comprehensive health education program. In rating the effectiveness of the district AIDS prevention education program, 25% of the respondents perceived the district program as minimally effective and 36% rated the program as only somewhat effective.

On a more positive note, 76% of the districts reported that teachers have been inserviced in AIDS information and safety. Of the responding districts, 54% indicated that the community had been involved in the planning of AIDS policies and programs. In terms of sources of information used by the district to develop the AIDS prevention education program, 61% of the districts reported using district personnel, 57% reported using the State Health Department,

Table 1

School District Survey Results: Program Demographics

Program Demographics	Percent of Responses Yes	No	Missing
School board adopted HIV/AIDS policy for employees	32	68	0
School board adopted HIV/AIDS policy for students	23	76	1
HIV/AIDS specific policy	26	67	7
School board adopted HIV/AIDS prevention education plan	58	39	3
Grade levels of instruction in combatting sexually transmitted diseases			
Primary	6	80	14
Intermediate	20	66	14
Seventh	47	39	14
Eighth	50	36	14
Ninth	45	41	14
Tenth	58	28	14
Eleventh	51	35	14
Twelfth	42	44	14
Subject areas responsible for HIV/AIDS instruction			
English	0	89	11
Health	84	5	11
Social Studies	6	83	11
Science	35	54	11
Physical Education	21	68	11
Mathematics	0	89	11
Home Economics	47	42	11
Other	7	82	11
Person responsible for HIV/AIDS instruction			
Nurse	29	61	10
Health teacher	80	10	10
Science teacher	33	57	10
Home Economics teacher	35	55	10
Physical Education teacher	18	72	10
Other content area teacher	2	88	10
Physician	6	84	10
Health Department personnel	27	63	10

Table 1 (continued)

School District Survey Results: Program Demographics

Program Demographics	Percent of Responses Yes	No	Missing
Sources of information for HIV/AIDS program			
District personnel	61	31	8
State Health Department	57	35	8
Local medical personnel	27	65	8
University personnel	10	82	8
State Department of Education	44	48	8
Commercially produced curriculum	50	41	9
Other	8	83	9
Personnel inserviced in HIV/AIDS			
Administrators	69	18	13
Teachers	76	11	13
Special services personnel	46	41	13
Clerical/secretarial	27	60	13
Custodial	30	57	13
Food services	33	54	13
Transportation	26	61	13
Classroom aides	33	54	13
Other	6	81	13
Grade level with HIV/AIDS education in comprehensive health program			
Primary	19	69	12
Intermediate	30	58	12
Seventh	47	41	12
Eighth	41	47	12
Ninth	30	58	12
Tenth	44	44	12
Eleventh	45	43	12
Twelfth	28	60	12

Note. Missing = percent of nonresponses.

Table 2

School District Survey Results: Program Characteristics

Program Characteristic	Percent of Responses					
	Very great	Great	Some	Minimal	None	Missing
Parent involvement in planning of AIDS policies and programs	7	12	37	26	13	5
Teacher involvement in planning of AIDS policies and programs	21	31	29	11	3	5
Student involvement in planning of AIDS policies and programs	0	5	20	42	27	6
Community involvement in planning of AIDS policies and programs	6	19	29	24	16	6
AIDS program as part of comprehensive health program	17	34	24	14	4	7
Availability of materials to teach AIDS prevention education	9	19	34	29	4	5
Effectiveness of AIDS program in providing knowledge of prevention	13	35	36	7	1	8
Effectiveness of AIDS program in providing knowledge of risk behaviors	17	37	29	6	2	9
Inservice training for school personnel	4	20	40	22	7	7
Inclusion of the benefits of abstinence and monogamous relationships in AIDS program	24	34	25	6	3	8
Effectiveness of the AIDS education program	7	25	36	21	4	7

44% reported using the State Department of Education, and 50% reported using commercially-produced curriculum as sources of information.

Student Survey Results

Of the 7,776 students responding to the survey 3761 (49%) were female and 3892 (51%) were male. In terms of ethnicity, 1% of the students were black, 4% were American Indian, 2% were Asian, 6% were Hispanic, and 85% were white. When categorized by grade level, the sample included 1524 (20%) eighth graders, 2059 (26%) ninth graders, 1349 (18%) tenth graders, 1582 (20%) eleventh graders, and 1212 (16%) twelfth graders. Table 3 summarizes the descriptive statistics relative to student responses for each survey item.

Data from the student survey on knowledge and attitudes about AIDS revealed that 88% of the students believed they should be taught about AIDS in school, and 65% felt an infected student should be allowed to attend school. On the other hand, only 47% of the students indicated they had received AIDS education in school. Fully 42% (23% no and 19% uncertain) were not sure where to find information about AIDS.

While the majority of students (85%) said that they know how to keep from getting AIDS, students did demonstrate some misconceptions about AIDS transmission. Of the responding students, 19% believed that a person could become infected from being bitten by insects (38% uncertain), 13% indicated that a person might become infected from having a blood test (22% uncertain), and 8% responded that a person could be infected from using public toilets (again, 22%

Table 3

Student Survey Results: AIDS Knowledge and Attitudes

Survey Item	Percent of Responses		
	No	Yes	Not sure
Should students be taught about AIDS in school?	4.2	88.3	7.5
Have you ever been taught about AIDS in school?	44.3	47.1	8.7
Should students with AIDS be allowed to go to school?	12.5	65.0	22.5
Are you willing to be in the same class with students with AIDS?	13.2	66.0	20.8
Do you know where to get information about AIDS?	22.6	58.8	18.6
Do you where to get tested for the AIDS virus infection?	34.0	46.0	20.0
Do you know how to keep from getting the AIDS virus?	5.0	85.0	10.0
Have you ever talked to friends about AIDS?	48.0	44.5	6.6
Have you ever talked to parents or adult relatives about AIDS?	48.1	46.0	5.9
Can a person become infected with AIDS by holding hands?	93.9	2.2	3.8
Can a person become infected with AIDS by sharing needles?	1.6	96.7	1.6
Can a person become infected with AIDS by being bitten by insects?	42.8	19.4	37.8
Can a person become infected with AIDS by having a blood test?	64.5	13.5	22.1
Can a person become infected with AIDS by using public toilets?	70.4	7.9	21.7
Can a person become infected with AIDS from sexual intercourse without a condom?	4.8	90.9	4.2
Can a person become infected with AIDS from a classmate having AIDS?	77.9	8.7	13.4

Table 3 (continued)

Student Survey Results: AIDS Knowledge and Attitudes

Survey Item	Percent of Responses No	Yes	Not sure
Can a person tell if people are infected with AIDS by looking at them?	73.2	6.7	20.2
Can a person with AIDS infect another person during sexual intercourse?	2.5	94.8	2.7
Can a pregnant woman with AIDS infect her unborn baby with the virus?	2.4	87.5	10.2
Is there a cure for AIDS?	85.1	2.9	12.1
Can only homosexual men get AIDS?	85.7	10.2	4.1
Can people reduce their chances of contracting AIDS by being abstinent?	7.2	63.2	29.6
Can people reduce their chances of contracting AIDS by using condoms?	4.4	87.1	8.4
Can people reduce their chances of contracting AIDS by not having sexual relations with a person who has injected drugs?	7.3	82.4	10.3
Can people reduce their chances of contracting AIDS by taking birth control pills?	82.0	3.0	15.0

uncertain). In addition, 3% of the students surveyed thought taking birth control pills might reduce the risk of contracting AIDS (15% uncertain), and 10% believed that only homosexual men could get AIDS (4% uncertain).

On a more positive note, 97% of the students knew that a person could become infected with HIV by sharing needles, 95% knew that sexual intercourse could transmit HIV, and 94% correctly responded that holding hands with another person would not promote HIV infection. Furthermore, 87% of the students knew that the use of condoms could reduce their chances of HIV infection.

School Personnel Survey Results

Of the total number of school personnel surveyed 320 (49.5%) were male and 325 (50.5%) were female. When categorized by school organizational structure, the sample included 89 (14%) middle school personnel, 169 (26%) junior high school personnel, 314 (48%) senior high school personnel, 22 (3%) middle/senior high school personnel, and 50 (8%) junior/senior high school personnel. Descriptive statistics for the entire sample relative to responses for each survey item are presented in Tables 4 and 5.

When asked their perceptions regarding the importance of AIDS prevention education, 97% of the teachers, counselors, and school administrators responded that AIDS education is worthwhile and should be included in the curriculum. Indeed, most of the school personnel (72%) felt that AIDS prevention education should begin as early as the elementary grades. However, 86% of the teachers and

Table 4

School Personnel Survey Results: AIDS Knowledge

Survey Item	Percent of Responses		
	True	False	Unknown
AIDS is a medical condition in which the body cannot fight off disease.	97.8	1.8	.9
AIDS can be cured if treated early.	1.7	94.6	3.7
Receiving a blood transfusion with infected blood can transmit AIDS.	98.6	1.4	0.0
For those who are sexually active, use of a condom can reduce the risk of AIDS.	99.7	.2	.2
It is important for students to learn about AIDS in school.	97.0	1.7	1.3
AIDS can be treated if diagnosed early.	2.2	93.5	4.3
I have the responsibility to be informed about AIDS so I can help in prevention awareness.	97.4	1.9	.8
Quarantining those with AIDS would help stop the spread of the disease.	25.8	62.8	11.4
A blood donor is at risk of getting AIDS.	3.2	95.5	1.2
A person can take a blood test to see if he or she has AIDS.	94.6	3.1	2.3
Children who attend school with someone who has AIDS are at risk of infection.	1.5	96.1	2.3
AIDS can be spread by mosquitoes and other biting insects.	9.1	80.0	10.9
Since AIDS is a disease of homosexual males, heterosexual males and females do not need to worry about getting it.	.2	99.8	0.0
People can be infected with the AIDS virus and can infect other people even though they have no symptoms.	97.7	1.4	.9
You can get AIDS by shaking hands with someone who has the disease.	.5	99.0	.5
If a pregnant woman is infected with the AIDS virus, there is a good chance that her baby will be born with the disease.	96.3	1.1	2.6

Table 4 (continued)

School Personnel Survey Results: AIDS Knowledge

Survey Item	Percent of Responses True	False	Unknown
There are many reported cases of AIDS being transmitted among family members of people who have the disease.	5.3	81.5	13.2
The technical or proper name for the virus is the human immunodeficiency virus (HIV).	87.3	8.4	4.3
Most individuals who are infected with the virus that causes AIDS are unaware they are infected.	82.1	9.0	8.9
The AIDS virus can remain dormant for six to eight years before a person displays symptoms of the actual disease.	96.3	2.0	1.7

Table 5

School Personnel Survey Results: AIDS Education

Survey Item	Percent of Responses				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I feel comfortable teaching my students about AIDS.	32.8	34.8	21.7	7.2	3.6
Our school board has been open in allowing AIDS education.	13.0	32.3	38.9	9.2	3.6
It's my job to teach about AIDS.	26.4	37.8	23.0	8.7	4.0
Our school administrators have been supportive of AIDS education.	17.9	38.4	34.8	6.5	2.5
Our district needs more resources to adequately teach about AIDS.	33.9	39.5	22.8	2.7	1.1
Our district AIDS policy has been clearly explained to us.	4.7	13.7	27.2	35.3	19.1
I would fear having a student with AIDS in my classroom.	2.2	14.1	24.1	33.8	25.3
I would fear having a fellow faculty member with AIDS in my building.	3.3	13.0	22.8	33.8	27.1
I believe that if my school has a student with AIDS, I should know his or her name.	33.2	35.7	16.8	8.6	5.8
Parents should be consulted about the AIDS curriculum.	36.9	48.1	9.5	4.2	1.4
The State Department of Education should tell us what to teach about AIDS.	18.4	42.0	19.8	11.9	7.8

Table 5 (continued)

School Personnel Survey Results: AIDS Education

Survey Item	Percent of Responses				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
AIDS education is a waste of time.	.3	.5	2.5	25.7	71.1
AIDS education should begin in the primary grades.	39.1	32.6	15.0	10.3	3.0
AIDS education should begin in the intermediate grades.	10.6	31.9	21.3	25.1	11.2
AIDS education should begin in junior high school.	9.9	22.3	16.2	29.5	22.1
I feel that the AIDS issue have been overpublicized and does not warrant my taking time to cover it.	1.1	1.7	8.2	35.5	53.5
If I were to teach about AIDS, I would need more information.	43.8	42.6	6.7	5.1	1.7

administrators said they need more information and inservice training to feel comfortable teaching about AIDS in their classrooms and 73% felt that their district needs more resources to adequately teach about AIDS.

Data from the school personnel survey indicate that teachers, counselors, and administrators possess basic knowledge of the characteristics of the HIV virus, methods of transmission, and strategies for prevention. However, 26% of the school personnel surveyed answered incorrectly when asked if quarantine would help stop the spread of AIDS (11% uncertain), 5% believed that there had been reported cases of AIDS being transmitted among family members (13% uncertain), and almost 4% were unsure of the fact that HIV-infected persons may not display symptoms of the infection for up to eight years.

On-Site Interview Results

During the on-site interviews, school administrators unanimously endorsed the need for and the value of AIDS education and decision-making skills for students. Most of the administrators reported being directly involved in the planning and implementation of an AIDS prevention education curriculum in their district. However, few of the administrators had any structured programs in place in their schools and reported that teachers were generally using outside resource speakers, self-gathered or developed materials, and videos and films on an ad hoc basis to teach about AIDS. In a related issue, over half of the administrators believed their teachers were frustrated that they could not teach more about the issues surrounding AIDS and AIDS transmission.

Generally, the health teachers who were interviewed spoke of the need for a coordinated inservice effort for all faculty, staff, and the community. Most of the health teachers had attended regional inservices where they obtained useful information about AIDS but not many methods for implementing the knowledge they gained. A majority of the teachers also expressed a need for a list of resources for teaching about AIDS and related issues. Some teachers felt constraints from their district administrators or community members in relation to the topics they were allowed to cover during instruction, and that fact limited their choice of resources and curriculum.

Curriculum Materials Analyses Results

In terms of curriculum materials for teaching about AIDS and related issues, most of the health teachers reported using outside resource speakers, self-gathered or developed materials, videos and films, and other materials obtained on an ad hoc basis. Several of the teachers said they use published texts (i.e., Glencoe and Globe Health Program) as supplementary resources. These commercially-produced materials focus for the most part on the biology of the HIV virus, the signs and symptoms of AIDS, and social and economic costs.

All of the health teachers expressed concern about the lack of curriculum materials addressing AIDS related issues such as "safer sex" practices, abstinence, homosexuality, and sexual decision making. Because of the lack of readily available appropriate curriculum materials, many of the health teachers develop their own which are

then supplemented with pamphlets, university-developed materials, and Red Cross and Metropolitan Life publications. In all cases, the health teachers felt that their instruction related to AIDS lacked continuity and integration within a comprehensive health education program. As such, some of the teachers hoped that the State Department of Educat would mandate some form of AIDS program so that educators would have the necessary support for curriculum development and implementation.

Conclusions

The purpose of the present study was to develop and implement a model and accompanying strategies for statewide evaluation of AIDS prevention education programs in Idaho public secondary schools. The resulting evaluation model consisted of five data collection components: a statewide school district survey, school personnel survey, student survey, on-site interviews, and curriculum materials analyses. Findings from these data collection sources support conclusions relative to the efficacy of both the program evaluation model and Idaho AIDS prevention education.

Program Evaluation Model

The evaluation model and accompanying strategies developed and implemented in the present study of rural AIDS education programs proved to be extraordinarily successful. The five components of the evaluation model yielded comprehensive data relative to student and school personnel knowledge and attitudes and AIDS education program characteristics and effectiveness. Furthermore, all sampled districts granted access to their schools, students, and teachers and, in all

instances, provided the resources and support needed for completion of the surveys, interviews, and curriculum analyses. Utilization of data collection teams composed of school personnel provided a mechanism for accessing information on the sensitive issues surrounding AIDS and AIDS education. Without doubt, teachers and principals were more comfortable and forthright when interviewed by individuals they perceived as peers.

The evaluation model developed for the present study utilized a multi-faceted data collection approach that provided information about both affective (i.e., attitudes towards AIDS and HIV-infected persons) and cognitive (i.e., knowledge of AIDS symptoms and methods of transmission and prevention) outcomes for students and school personnel. Moreover, the evaluation model served the important purpose of actually talking to the individuals involved in program development and implementation. Through the collection of qualitative and quantitative data, information requisite to comprehensive program evaluation was accessed and directions for future revision and expansion were identified.

AIDS Prevention Education

While this study indicates that AIDS prevention education is taught in many Idaho public schools at some time during grades 8-12, its findings also show that most topics related to prevention of AIDS are taught less often and later than teachers in these schools think they should be. The greatest discrepancies are in the areas of safe sex practices, abstinence, homosexuality, and sexual decision making.

Many factors outside the classroom often make it difficult for teachers to meet the AIDS prevention education needs of students.

The most common problem cited by health teachers is pressure or fear of pressure from parents, the community, or the school administration. These concerns contribute to teachers' perceptions that they are restricted on what they can teach. While the perception of teachers of a lack of support, however, is at variance with the support for AIDS prevention education shown in national polls (Harris, 1990), similar statistics are not available for Idaho parents and communities. As such, a parent survey component should be included in future AIDS prevention education program evaluation models. Clearly, specific state and district policies with respect to AIDS education could reduce teacher concern about adverse pressures and provide much real support for school personnel.

According to the health teachers interviewed in the present study, a lack of teaching materials is a common problem, spanning many topics related to AIDS prevention and transmission. Consequently, teachers must use valuable time to develop teaching materials themselves. Because teachers are not experts in all topics they must cover, developing their own materials adds to the danger that dated, inaccurate information may be passed on to students. Perhaps the most important step toward improved AIDS prevention education would be an increased, clear support of teachers through development and provision of instructional materials to adequately deal with the issues surrounding AIDS.

The findings of the present study underline the need for states and school districts to concentrate on aligning AIDS education policy

with classroom practice. Toward that end, AIDS prevention education programs should delineate recommended age-specific curricula for each grade level beginning in the primary grades to insure that all students are provided with accurate knowledge, decision-making skills, and awareness of the psychosocial issues of AIDS. In addition, parents, teachers, and administrators need expanded inservice opportunities that focus not only on AIDS facts and information but also on the methods and re. urces for creating developmentally appropriate and effective AIDS prevention education.

As with other rural, low-incidence states, Idaho has gone from almost no school-based AIDS educ ion programs two or three years ago to having the majority of schools at least addressing the issue. Both awareness and acknowledgement of the need for AIDS prevention education have been created. However, while heightened awareness is the first vital step to program success, concerted efforts to educate rural students about AIDS and its concomitant issues must not only continue but, by necessity, expand and improve.

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