

A STUDY OF THE KNOWLEDGE, EXPERIENCES AND
ATTITUDES OF SCHOOL COUNSELLORS IN
NEWFOUNDLAND AND LABRADOR AS THEY RELATE
TO AIDS AND AIDS EDUCATION

CENTRE FOR NEWFOUNDLAND STUDIES

**TOTAL OF 10 PAGES ONLY
MAY BE XEROXED**

(Without Author's Permission)

CYNTHIA LYNN ROSE



**A STUDY OF THE KNOWLEDGE, EXPERIENCES AND
ATTITUDES OF SCHOOL COUNSELLORS IN
NEWFOUNDLAND AND LABRADOR AS THEY
RELATE TO AIDS AND AIDS EDUCATION**

by Cynthia Lynn Rose B.A. B.Ed. (Conjoint)

A Thesis submitted in partial fulfilment of the requirements
for the degree of
Masters of Education

Department of Educational Psychology
Memorial University of Newfoundland

August, 1995

St. John's

Newfoundland



National Library
of Canada

Acquisitions and
Bibliographic Services Branch

395 Wellington Street
Ottawa, Ontario
K1A 0N4

Bibliothèque nationale
du Canada

Direction des acquisitions et
des services bibliographiques

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file *Votre référence*

Our file *Notre référence*

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-612-13942-5

Canada

ABSTRACT

One hundred and twenty three school counsellors employed in the public schools of Newfoundland and Labrador completed a survey questionnaire to determine their knowledge level, attitudes, personal and professional experience related to AIDS and AIDS education. The survey addressed their background as counsellors, AIDS related educational experience, their knowledge of AIDS, counselling and personal experience related to AIDS, and the types of AIDS educational activities being provided to the students in their schools.

School counsellors are unanimous in their view that AIDS education must be addressed in the public school for students, teachers and themselves. A full one third of those surveyed had not received any formal inservice education which specifically addressed AIDS and AIDS education. Although, as a group, their AIDS related knowledge level was moderate to high, there were some specific knowledge gaps in the area of statistics related to transmission and prevention. A significant number of school counsellors surveyed have been providing their students with professional services related to AIDS including; addressing the anxiety of students who fear becoming infected, sending students for HIV testing, and a small number have counselled students who are HIV positive. However, despite this extensive involvement, 38% of counsellors have not been involved in any of these types of counselling activities.

Counsellors were aware of their ethical responsibility and the ethical guidelines relating to the "duty to warn" when working with clients who are HIV

positive. They also showed a sensitivity to and concern over balancing this obligation with their commitment to ensure confidentiality. Counsellors reported a high level of comfort with respect to personal contact with persons who are HIV positive. They expressed the need for reliable and up-to-date AIDS related information and for education in dealing with loss, uncertainty and confusion in preparation for work with HIV clients.

Although counsellors did identify various AIDS education activities which are on-going at the school level as part of educating students about AIDS, their responses and recommendations reflect the view that improvement of AIDS education for school counsellors and students in the public schools of Newfoundland should be given increased priority.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	viii
CHAPTER 1 - INTRODUCTION	1
Purpose	1
Research Questions	1
Rationale	2
Definition of Terms	5
Limitations	5
CHAPTER 2 - REVIEW OF THE LITERATURE	7
AIDS: The Epidemic	7
AIDS, the Adolescent and the Child	10
AIDS Education: The Role of the Schools	13
AIDS Education and the Role of the School Counsellor	17
AIDS: Knowledge and Attitudes	19
AIDS and Ethical Issues	20
CHAPTER 3 - METHODOLOGY	22
Sampling Procedure	22
Method of Data Collection	22
Description of the Questionnaire	23
Scoring and Analysis of the Data	24
Scoring	24
Analysis of the Data	24

CHAPTER 4 - RESULTS AND DISCUSSION	26
Characteristics of School Counsellors in the Study	26
Gender and Geography	26
Age, Education, and Counselling Experience	26
Teaching and other Related Duties	28
Professional and Personal Experience of School Counsellors	28
Introduction	28
Educational Experiences	29
Counselling Experience	31
AIDS Related Counselling Challenges	34
Provision of AIDS Educational Activities for Students	37
Perceived Level of Comfort	40
Awareness of HIV-Positive Individuals	41
Experiences Affecting their Beliefs about AIDS	42
Changes in Beliefs	44
Knowledge Level Related to AIDS	45
Statistical Knowledge	46
General Knowledge Related to AIDS	46
Transmission and Prevention	47
Views and Attitudes	51
Perceptions of Self Knowledge Related to AIDS	51
Perceptions of Student Knowledge Related to AIDS	52
Attitudes Reflecting Fear of HIV/AIDS Infection	53
Attitudes Regarding AIDS Related Policy Issues	55
General Attitudes Regarding the Issue of AIDS	58
AIDS Prevention Curriculum	59
General Comments and Recommendations	59
CHAPTER 5 - CONCLUSIONS AND RECOMMENDATIONS	61
References	72

Appendix A - Questionnaire	76
Appendix B - Letter to School Counsellors	89
Appendix C - Other AIDS Educational Activities	91
Appendix D - Additional Comments	93

LIST OF TABLES

TABLE

1	Percentage of School Counsellors By Age	27
2	Years of Experience As A school Counsellor	28
3	Percentage of School Counsellors Receiving AIDS Related Educational Inservices	30
4	Other AIDS Related Educational Experience	31
5	AIDS Related Counselling Experience By Percentage and Estimate of Number of Students Seen	33
6	Other counselling Experience Related to AIDS	34
7	AIDS Related Counselling Challenges of Counsellors Who Have Counsellor HIV-Positive Students	35
8	Perception of AIDS Related Counselling Challenges	37
9	Provision of AIDS Educational Activities For Students	39
10	Perceived Level of Comfort If In Contact with an HIV Positive Individual	40
11	Awareness of HIV Positive Individuals	41
12	Experiences Affecting School Counsellors Beliefs About AIDS	43
13	Changes in Beliefs	44
14	AIDS Related Knowledge Level of Counsellors By Percentage of Correct Responses	45
15	AIDS Related Knowledge of School Counsellors By Item and Percentage of Counsellors Who Answered Each Item Correctly	48

16	Perception of Self Knowledge Related to AIDS	52
17	Perception of Student Knowledge Related to AIDS	53
18	Attitudes Reflecting Fear of HIV/AIDS Infection	54
19	Attitudes Regarding AIDS Policy Issues	56
20	General Attitudes Regarding the Issue of AIDS	58
21	Counsellor's Perception of Grades in which AIDS Prevention Curriculum Should Begin	59

CHAPTER ONE

INTRODUCTION

Purpose

The purpose of this study was to obtain a description of the knowledge, experiences, and beliefs of school counsellors in the Province of Newfoundland and Labrador with respect to Acquired Immune Deficiency Syndrome (AIDS) and how AIDS Education is addressed within the public school system.

Research Questions

This study sought to answer the following questions:

1. How knowledgeable are school counsellors about the issue of AIDS and AIDS Education?
2. What are their professional and personal experiences related to the issue of AIDS and AIDS Education?
3. What type(s) of AIDS educational programming and counselling related services are made available in their respective schools?
4. What recommendations would they offer to improve their present level of AIDS education and to enhance their competency to deal with AIDS related challenges in the public school system?

Rationale

A number of factors combine to make a study of school counsellors' experiences, knowledge and beliefs related to AIDS and AIDS Education a worthwhile endeavor:

First, worldwide, AIDS continues to spread among men, women, teens, and children. As of January 1994, the World Health Organization (WHO), estimated that 9 to 11 million individuals are infected with the human immunodeficiency virus (HIV), which causes AIDS (WHO, 1994). At the present time, there are approximately 156 known cases of HIV in Newfoundland and Labrador. Forty-seven of these cases have AIDS of which 34 have already died. (Government of Newfoundland and Labrador, Department of Health, 1994). Over 50% of these 156 HIV-positive cases involved infection of individuals less than 30 years of age (Newfoundland AIDS Committee, 1994).

As the rate of infection continues to grow in the teenage and young adult population, with no cure in sight, prevention through education is the strongest defence against the transmission of HIV to non-infected individuals. Therefore, the public schools are not immune to this reality and are faced with the challenge of actively informing students of the risks associated with high-risk sexual behavior, helping them to change any such behaviour, providing services to students who require support because a family member or friend is infected, and providing counselling and support to students who are themselves infected. In order to meet

this challenge most effectively, those involved in the education process can provide information about what programs and services are presently in place, as well as identify supports and resources needed by educators to improve the effectiveness of AIDS related programming in the schools. School counsellors are one group in the education system who can, in collaboration with their colleagues in education and health, develop, promote, and deliver some of the resources and services needed to address the many issues and concerns associated with AIDS and AIDS education.

Second, school counsellors are in a unique position to gain valuable information useful in the development, implementation, and improvement of AIDS education in the school systems. Counsellors, in their efforts to implement comprehensive guidance programs, are expected to assume a number of roles and responsibilities. These roles include close contact with students through individual and group counselling, and group guidance in the areas of personal and social development (Government of Newfoundland and Labrador, Department of Education, 1988). It is through these varying roles that the school counsellor is able to gather a wealth of information regarding student needs. It is this information which can be useful in the development of AIDS prevention programs within the school systems. Many counsellors may even take a more formal approach by administering a needs survey to students, teachers and sometimes parents, as a basis for establishing their AIDS educational programming.

Third, school counsellors, as part of their role in the school, are expected to offer their expertise in developing programs which address the personal and social needs of students in their schools. Although AIDS prevention may be seen as a health issue, it is clearly an educational challenge as well. The life threatening nature of HIV, the concerns with changing students attitudes and behaviours, and the many anxieties associated with AIDS clearly require school counsellors to be knowledgeable and active in AIDS education. The first step in providing educational opportunity to school counsellors regarding AIDS is to evaluate their current level of knowledge about AIDS. Therefore, an evaluation of the school counsellors knowledge, experiences, and beliefs could provide valuable information useful in the development of pre-service and in-service education needs of school counsellors.

Finally, through the examination of school counsellors' experiences, both personal and professional, two goals may be met: (a) the personal experiences of a sample of the general population, like school counsellors, can be determined and inferences made regarding the need for further AIDS education; (b) an examination of the AIDS related professional and programming experiences of school counsellors will help form a body of knowledge of how the issue of AIDS is being addressed in the Newfoundland and Labrador school system.

Definition of Terms

The following are the basic terms utilized in this study:

AIDS: Acquired immune deficiency syndrome is a life threatening disorder of the immune system which leaves the body defenceless against disease. AIDS is caused by a virus known as HIV. Although treatment of this disorder can prolong life, there is no known cure.

HIV: Human Immunodeficiency Virus is a virus which is transmitted by direct transmission of bodily fluids from an infected individual. Most people with HIV have developed symptoms or progress to the stage considered to be AIDS.

School Counsellors: The professionals, identified by the Department of Education, as the persons responsible for the development and delivery of guidance and counselling services.

For this study, the terms AIDS virus and HIV are used as synonymous and interchangeable terms.

Limitations of the Study

As with most research, some caution must be taken when interpreting the results of this study. The following points highlight the limitations of this study:

1. This study is limited to school counsellors in the Province of Newfoundland and Labrador. Therefore, any generalizations to school counsellors outside this Province could only be made with the utmost caution.
2. It is often difficult to assess knowledge by means of a questionnaire and self assessment because it requires a high level of openness and self awareness in order to increase the reliability of the findings. Participants may also have a tendency to give, what they believe to be, 'socially desirable' responses.
3. Since this is a preliminary descriptive study, it does not permit an analysis of relationships among variables which might be considered significant.

CHAPTER TWO

REVIEW OF THE LITERATURE

This chapter reviews the extent of the AIDS epidemic in North America, as well as, AIDS and the school age population. It examines the special challenges and responsibilities facing educators and counsellors who work with children and adolescents regarding AIDS education and the provision of counselling services to students and families who have direct experience with the virus.

AIDS: The Epidemic

Acquired Immune Deficiency Syndrome (AIDS) and the Human Immunodeficiency Virus (HIV) were first identified in the early 1980s. Since that time, the number of AIDS cases in North America has risen dramatically. As of December, 1994, Health Canada has received reports of 10,689 cases to date which meet the definition for AIDS and a total of 7,471 deaths have been reported in Canada (Government of Newfoundland and Labrador, Department of Health, 1994). The World Health Organization (WHO) estimates that HIV will have infected 40 million people worldwide by the turn of the century. It further suggests that it is unlikely that the "global prevalence of HIV will stabilize or level off for at least several decades" (Tonks, 1993, p.50).

In Newfoundland and Labrador, the AIDS virus continues to spread. As of December, 1994, 124 males and 32 females have tested HIV positive and at present

47 cases of clinical AIDS have been documented in the Province. Of these 47 cases, 35 have died from complications due to AIDS (Department of Health, 1994). These numbers may appear low until one considers that there may be many more individuals who are HIV infected but have not requested HIV testing. The spread of HIV in Newfoundland continues to rise, especially within the female population. Newfoundland has the second highest per capita female HIV infection rate in Canada. The HIV infection rate for pregnant women in Newfoundland is about four times higher than the national average (Government of Newfoundland and Labrador, Department of Health, 1994). Casey (1995), in citing these and other health related statistics, points out that "risk taking behavior and its consequences are occurring in a province that is undergoing substantial changes in its economic, social, and cultural fabric . . . the need for health education and community involvement has never been greater" (p.7).

Educators and other professionals are now realizing that children and adolescents are not immune to the spread of this virus. Leland and Barth (1993) points out that in November 1991, 768 of the 202,843 total identified U.S. cases of AIDS were diagnosed in adolescents (Centre for Disease Control, 1991). However, because estimates for the incubation period for the AIDS virus span from 2.5 to 15 years (Harris, 1987), they suggest it is probable that the time of infection for a substantial number of the 39,768 cases of AIDS diagnosed in those individuals in the

20 to 29 years of age range actually occurred when these people were adolescents and engaging in unsafe sex (p.59).

Infants and school age children are affected by the AIDS epidemic, both directly and indirectly. Because of HIV transmission in utero from HIV positive mothers, it is expected that by 1997, HIV/AIDS will become the largest cause of mental retardation and brain damage in children (Gray and House, 1989). This will have an impact on the schools and educators who will be expected to meet the special needs of these students.

As the number of HIV infected individuals increases, and many of these infected individuals show symptoms of AIDS, more and more people, especially school age children, are affected by the virus. When school age children have family members who are dying from AIDS, schools will be forced to address the issue of AIDS and grief counselling for their students whose lives may be in upheaval because a loved one is dying or has died. Many preadolescent school age children are indirectly affected by AIDS, and there are a small number of children who have been infected by HIV, mostly through birth and blood transfusions. Also, controversy continues to surround the issue of confidentiality and school attendance of the HIV infected student. Fear and ignorance continues to prevail in the mainstream population regarding the issue of AIDS.

The adolescent population is one group which, given the infection statistics, should be given special consideration in terms of the risk of infection and the need

for education. House and Walker (1993) support this view when they comment on the characteristics of the individuals in the adolescence stage of development. They suggest that:

"adolescence is a time of life characterized by experimentation, confusion, and challenging authority. Teens see themselves as immortal and invulnerable, which can lead them to take chances and experiment with risky sexual behavior and drug use" (p.283).

AIDS, the Adolescent, and the Child

In 1988, Health and Welfare Canada funded a project entitled "Canada, Youth, and AIDS" study (Government of Newfoundland and Labrador, Department of Health, 1989). This study, conducted by Queen's University, surveyed 38,000 Canadian youth, ages 11 to 21, to determine their knowledge, attitudes, and behaviors with respect to AIDS and other sexually transmitted diseases (STDs). In general, this survey concluded that young Canadians can accurately define AIDS but are not as well informed about how to prevent HIV infection. It also found that, although there is a general anxiety among young people about AIDS, it does not seem to have motivated them to modify their at risk behavior. According to the research, most of the youth surveyed do not believe their own sexual behaviors could put them at risk of contracting a STD and therefore do not consider abstinence or using protection when having sexual intercourse. Of the fifty to seventy-five percent of 16 to 21 year olds who indicated they are engaging in sexual intercourse, only

twenty-five percent protect themselves "most of the time" by using a condom (P.133).

Roscoe and Kruger (1990) suggest that those who work with the middle and late adolescent must be aware of the warning offered by professionals from the medical field. He cites Staff (1988) when he states:

"given the fact that a significant portion of today's persons with AIDS (PWA) were affected as adolescents due to the time lag, it is imperative to realize that given time and continued operation of risk - transmission vectors, AIDS will spread, especially among the adolescent population so prone to beginning now hazardous sexual activity at this developmental period" (p.6).

Research has shown that adolescents engage in high risk sexual behavior and are susceptible to STDs such as HIV infection (Feldman, 1989, O'Connor, 1992). Dworkin and Pincu (1993) discussed the importance of HIV testing and how critical testing is for the teen. Given the advances made in the early treatment of HIV infected individuals, this early detection in a high risk population such as adolescence would seem even more important.

The mode of transmission of the virus in the adolescent population is not restricted to sexual behavior. Some adolescents are not engaging in high risk sexual behavior but have, never the less, contracted the virus. These adolescents and children, such as those who have hemophilia, share needles, and have blood transfusions, may still face a life that includes all the challenges of being a HIV infected person.

In a review of the literature for their study of adolescents who attempted to avoid HIV, Leland and Barth (1993) cited the following American statistics; More than fifty percent of U.S. adolescents have engaged in sexual intercourse by age 17 (Harris & Associates, 1986), forty-nine percent of female adolescents have multiple sex partners (Hoferth & Hayes, 1987; Zelnick, 1983), 2.5 million acquire one or more sexually transmitted disease annually (Centre for Disease Control, 1987), and most do not use condoms (Harris, 1986; Kegeles, Adler & Irwin, 1988). Given these statistics, AIDS is clearly a significant threat to the teenage population.

For adolescents in Canada, the level of sexual activity was cited in the Canada, Youth, and AIDS study (1988). These researchers found that Canadian teenagers are as sexually active as American teenagers with almost fifty percent of adolescents up to age 17 having engaged in sexual intercourse. A review of the sexual behavior of the Newfoundland adolescents surveyed in this 1988 study also indicated similar results as the American and Canadian statistics with 37 percent of 14 to 15 year olds and 55 percent of 16 to 17 year olds reporting that they have engaged in sexual intercourse at least once. (p. 25-26)

One important question that has been posed in the research on the sexual behavior of the adolescent is "what makes some adolescents choose to engage in high-risk sexual behavior while others refrain from engaging in the same behaviors?" Leland and Barth (1993) found sexually experienced students who reported that they attempted to avoid exposure to AIDS were more likely to have discussed a variety

of sexual topics with their parents including ways to protect themselves from STDs. Therefore, they concluded that "one to one" communication between adolescents and trusted adults may have a positive effect on reducing the high-risk behaviors among young people.

These findings suggest the need to develop a parent-adolescent sexual communication component of AIDS prevention education as a means of reducing high-risk sexual behavior. Other researchers support these findings (Barth, 1989, Kirby, Barth, Leland and Fetro, 1991). However, further research appears to be needed to determine what and how information is discussed with parents (Leland and Barth, 1993).

AIDS Education: The Role of the Schools

In the 1990s, the only cure for AIDS is prevention. Douce (1993) emphasize the importance of school, college, and university counsellors, and administrators embracing the educational challenge. Also, as Ostrow (1989) points out:

"if 'education is the cure for AIDS' is to be more than a cliché, then we must continually seek ways to evaluate our current efforts, and design educational programs which can have a maximum impact on the future AIDS epidemic" (p.251).

He further suggests the importance of developing an educational message that balances the threat of AIDS with realistically achievable behavioral change that encourages a sense of responsibility for and on the part of the adolescent.

Levine (1991) suggests that developmentally appropriate school-based AIDS education should be supported from kindergarten through higher education. She cited the Center for Disease Control (1988) guidelines for effective health education which encourages school systems to make programs available that will enable young people who have not engaged in sexual intercourse to abstain from sex until marriage, to encourage those who are having sex to stop until they are ready to marry, and for those young people who continue to put themselves at risk, the CDC recommends that "school systems, in consultation with parents and health officials, should provide AIDS education that address preventive types of behavior . . . including condom use" (P.4).

Developing an educational program that addresses the AIDS prevention needs of students in our school systems has not been an easy task. Bayer (1989) discussed the behavioral goals of education and suggests that one clear and simple goal in AIDS education is "those who are uninfected will have to insist that condoms be used in sexual intercourse with partners whose HIV status is uncertain. Some will choose not to have intercourse, under any circumstances with the infected" (p. 95).

Carol Levine (1991) Executive Director of the Citizen Commission on AIDS for New York City and Northern New Jersey, discussed the conclusions reached by this commission regarding AIDS education and prevention in the public school systems. Levine concluded that educational efforts against the spread of HIV must contain several key elements. Two of the suggestions presented were the need for;

(1) educational messages to be developed and communicated by persons who are knowledgeable and credible to the audience, and (2) approaches to include positive alternatives to risky behavior. She suggests that social acceptability and humor are often more effective than fear arousing messages.

The Department of Education, Government of Newfoundland and Labrador, has developed components of the health curriculum that addresses the issue of AIDS education. The junior high school Health/Adolescence programs do include units on human sexuality which does address the issues of responsible behavior relating to the transmission of sexually transmitted diseases, HIV, AIDS, and safer sex. The Avalon Consolidated School Board (1993), is just one school board which has distributed a special resource to be used by their Health/Adolescence teachers. This resource, titled "Skills for Healthy Relationships" (1993), was developed by Queens University as part of an experimental Grade nine AIDS/STD/ Sexuality Program. Although developed for the grade nine program, it is being recommended for use in the grade seven and eight health programs.

Some school boards have formed committees whose mandate it is to develop policies and procedures surrounding the issue of sexually transmitted diseases and AIDS within their respective school systems. One such committee was formed by the Avalon Consolidated School Board in June, 1992. This "Committee on Sexually Transmitted Disease and AIDS", through the process of gathering information from

other school jurisdictions and their own students, teachers, and parents, developed a mission statement stating:

*The Avalon Consolidated School Board will strive to provide our youth with the knowledge education and skills they must acquire in order to prevent or at least minimized infection with STDs/AIDS, and to develop school and individual measures which help youth develop values and lifestyles that maintain or enhance their state of well being (p.7).

The development of this type of mission statement is grounded on the fundamental belief "that schools, in partnership with parents and community must play a pivotal role in the education of youth about sexuality" (p.7). This type of initiative by local boards such as the Avalon Consolidated School Board, indicates that educators have recognized a need within their schools and are taking action to meet these needs.

In 1992, the Department of Education, in conjunction with Memorial University of Newfoundland School of Social Work, embarked on a follow up study to the 1988 "Canada Youth and AIDS Study". This study, "Sexuality, AIDS, and Decision Making: A Study of Newfoundland Youth" (1992), concluded that Grade Eleven students are better informed than they were in the 1988 study on some of the issues pertaining to AIDS and STDs, and some of their attitudes have become more open and less judgemental. The researchers concluded that the introduction of the grade nine Adolescence course appears to be related to this improvement and this finding "places schools in a role of even greater responsibility for providing education that will not only inform, but will also stimulate students' ability to

translate this knowledge into day-to-day situations and to apply it thoughtfully and with circumspection" (Avalon Consolidated School Board, Policy and Procedures, p.15).

AIDS Education and the Role of the School Counsellor

During the 1990's, school counsellors, whose role and responsibilities are defined by the needs of the students they serve, will be expected to use their expertise to meet some of the challenges posed by this life-threatening AIDS epidemic. Such responsibilities include developing a guidance program that assist students in gaining accurate AIDS related information, promoting the development of skills useful in responsible decision making, and providing counselling related services to those students whose life has been directly or indirectly affected by the AIDS virus (Guidelines for Guidance Services, Department of Education, 1989).

Most of the research in the area of AIDS and counselling tends to focus on the needs and dilemmas of individuals who need counselling and related support because they either have AIDS/HIV or someone close to them has AIDS/HIV (Croteau, Nero, Johnson-Prosser, 1993; Dworkin and Pincus, 1993). The fear of a life threatening disease such as AIDS will sometimes create a group which Dworkin and Pincus (1993) have identified as the "worried well". This group may include those individuals who may or may not be engaging in high risk behaviors but whose lives have been negatively affected by their fear of becoming infected with HIV (p.279).

Although the counselling needs of this group may differ from those who are HIV infected, these individuals may require counselling services to cope with these fears.

AIDS related services in the public school system can be divided into two categories: programs with components that address AIDS/HIV prevention and those with components that provide services to address the needs of those who are infected or whose family members are infected. Roscoe and Kruger (1990) suggest that successful AIDS education will need to be integrated into the reality of normal sexual experimentation. They cited Keeling's (1988) recommendations of how counsellors and educators "need to provide explicit education" and the importance "for educators to be direct and open discussing safer sex; they need to communicate on a level to which their audience can relate." More specific to the counsellors role, Keeling further suggests that "developmental counselling needs to be offered. Young people need to be taught empowerment, assertiveness, and negotiation skills" (p.46). Characteristics of an effective counsellor of adolescents were also addressed by Keeling who promoted the effective use of the counsellor/student relationship stating "adolescents need a counsellor who is sensitive, yet direct and explicit - a professional who will talk to them in their own language and listen without bias" (p.25).

AIDS: Knowledge and Attitudes

Previous research has shown that AIDS elicits negative reactions from the general public and certain health care professionals (Douglas, Kalman, & Kalman, 1985; Kelly, St. Lawrence, Hood, Smith, & Cook, 1988; Katz, Hass, Parisi, Astone, McEvaddy, & Lucido, 1987). In a 1990 study of practising psychologists and their attitudes toward patient with AIDS, St. Lawrence, Kelly, Owen, Hogan, and Wilson (1990), concluded that respondents evaluated an AIDS patient more negatively and reported less willingness to interact with him in a professional role or in casual social situations.

Further research relating to attitudes and knowledge was completed by Carney, Werth, and Emanuelson, (1994) who found that for undergraduate students, the more knowledge a student has about HIV disease, the more willing he or she is to associate with an HIV infected individual and the less homophobic he or she is likely to be. They also found that the level of AIDS related knowledge of students in counsellor education programs was average with correct responses ranging from 53 to 90 percent. They concluded that counsellors in training who reported positive attitudes toward persons who are gay and persons who have AIDS also tended to demonstrate higher levels of HIV and AIDS knowledge. Similar conclusion were also supported by earlier research (Fennel, 1990; Goertzel & Bluebond-Langer, 1991). Furthermore, Scollay, Doucett, Perry, & Winterbottom, (1992) found that personal association with a person who is gay or a person with the HIV disease

increases tolerance toward members of these groups. Although it is no longer appropriate to view AIDS as a gay disease, many of these studies have examined homophobic attitudes as well because attitudes related to AIDS are often connected with attitudes toward persons who are gay.

In the area of knowledge and change in behavior, Scollay et al (1992) found that although knowledge scores increased significantly, similar increases in behavioral intent had not similarly been affected. However they further concluded that HIV positive speaker can have a significant influence on AIDS/HIV prevention programs aimed at altering behavior.

The relationship between attitudes toward AIDS and knowledge of AIDS has also been studied by Royse, Dhooper, and Hatch (1987). They found that, for undergraduate and graduate students, greater knowledge was associated with greater empathy. They further suggested the importance of knowledge for reducing fear of AIDS and improving empathy for victims of AIDS.

AIDS and Ethical Issues

The AIDS epidemic presents Canadians with the challenge of balancing the rights of the individual with the rights of the community to be protected from health related threats. The right to privacy and confidentiality of medical and sexual information, the right to freedom of association, freedom of movement, and the right

to protection from wrongful discrimination are all considered the liberties at risk as the AIDS epidemic gains momentum.

School counsellors are educated to have strong commitment to the principles of privacy and confidentiality. Through their professional experience, school counsellors are often privy to confidential information. This may place them in situations which require ethical decisions that conflict with the confidential counselling relationship. Harding, Gray, and Neal (1993), in their review of the issues surrounding the confidentiality dilemma, with respect to HIV, concluded that the emerging ethical theme in the helping professional literature is:

"Counsellors, psychologists, psychiatrists, social workers, and physicians have an obligation to consider the health and welfare of society at large when AIDS clients are unwilling to inform sexual partner(s) with whom they are exchanging bodily fluids" (p.303).

In the case of the school counsellor, who would possibly be involved in a counselling relationship with an adolescent, the ethical judgement would require not only consideration of the threat of infection to the students' partner(s) but also the fact that a young person who is HIV-positive will need the guidance and support of a caring adult to assist in telling others such as parents. Counsellors are challenged to maintain confidentiality so that students are encouraged to approach their school counsellor if they suspect they are HIV-positive, while assisting them to locate appropriate resources and to make necessary decisions require a high level of professional competency.

CHAPTER THREE

METHODOLOGY

Sampling Procedure

The sample for this study consisted of all individuals employed under the title "School Counsellor" in Newfoundland and Labrador. A list of all school counsellors employed by the school boards within the Province was obtained from the Department of Education. Of the one hundred and ninety school counsellors, one hundred and twenty three (65%) returned completed questionnaires.

Method of Data Collection

A copy of the research questionnaire (Appendix A) was mailed to all school counsellors identified in a directory obtained from the Department of Education. All respondents in the study remains anonymous. A letter outlining the purpose of the study and the availability of cash prizes to those counsellors who returned their completed questionnaire within a given time frame was also attached (Appendix B).

Two weeks following the first mailing, the researcher sent another letter and/or made phone calls to those whose questionnaire had not been received. The purpose of this second contact was to remind those counsellors who may have forgotten to return their questionnaire and/or to obtain feedback on problems or concerns related to their completing it. All questionnaires were returned to the researcher by the end of May.

Description of the Questionnaire

The questionnaire was developed for this study. Initially, an extensive search of the literature was conducted with particular attention to such areas as: research on the attitudes, and the knowledge of various professional and lay groups, AIDS information within the public domain as presented in the media and the public information literature, the salient messages and factual information within various school-based AIDS education programs, and the potential ethical issues related to the conduct of counsellors and other educators on matters related to AIDS. Following the generation of a list of questions based on this search, the questionnaire was refined and further changed. This draft questionnaire was critically evaluated by a number of individuals and groups. The draft questionnaire was reviewed by the AIDS Committee of Newfoundland and Labrador. It was further examined by several counsellor educators and by a number of graduate students in counselling. They were asked to comment on the appropriateness of its contents, the clarity of the instructions and questions, and to make any suggestions which might improve both the presentation and the substance of the questionnaire. The final version of the questionnaire, following this consultation process, was then printed in a booklet form intended to enhance its layout and appeal to potential respondents.

The following were the main areas of interest as they relate to the research questions identified:

- Demographics of the counsellors involved.
- The general attitudes of counsellors toward various aspects of AIDS.
- The general knowledge level of counsellors with respect to the AIDS issue.
- Training, background, and experiences of the counsellor related to HIV/AIDS.
- Perceptions of the counsellors with respect to improving educational programming in the area of AIDS prevention.
- The AIDS related programming and services presently in place at the public school level.

The majority of the questions included on the questionnaire required the respondents to select a response from a number of different response formats. A number of open ended questions also invited the respondents to provide brief comments.

Scoring and Analysis of Data

Scoring

The scoring for the questionnaire involved assigning numeric values to each part of a question in order to code the data for computer analysis. It was then transferred to coding sheets and entered into a computer file for processing.

Analysis of the Data

The data were analyzed using the Statistical Package for the Social Sciences (Norusis, 1993).

The statistical analyses were of a descriptive nature. Frequency distributions were generated for the majority of questions and cross tabulations were calculated across age, gender, urban/rural location of the school(s) served, and teaching duties assigned to the school counsellors.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents a comprehensive analysis of the data gathered to investigate the four research questions outlined in Chapter One. In order to enhance readability and to focus on predominant patterns observed throughout the data analysis, the results will be presented in five sections dealing with the following: (A) Characteristics of school counsellors in the study; (B) Professional and personal experiences; (C) School counsellors knowledge level; (D) Views and attitudes of school counsellors and; (E) Recommendations by school counsellors related to the issue of AIDS education.

Characteristics of School Counsellors in the Study

Gender and Geography

Of the 123 school counsellors who returned the questionnaire, 53.7% were female and 46.3% were male. In terms of location within the province, 59.5% of the school counsellors served a rural area while 40.5% served an urban area. For the purpose of this study, communities with a population of 5000 and over are defined as urban, and those with a population under 5000 are defined as rural (Government of Newfoundland and Labrador, Department of Education, 1994).

Age, Education, and Counselling Experience

The age of the school counsellors ranged between 25 and 54. The highest percentage of counsellors were in the 40 to 44 age category and 71.5% were over the age of 35. (See Table 1).

Table 1**Percentage of School Counsellor's by Age**

Age	(N = 123)	% of School Counsellors
25-29		10.6
30-34		12.2
35-39		21.1
40-44		23.6
45-49		21.1
50-54		5.7
Missing data		5.7
Total		100%

School counsellors were asked to indicate the highest degree they had completed. Their responses were assigned to one of three categories: bachelors degree, masters degree, and other, which included those who had obtained a graduate diploma. The majority, 84.4%, had completed their masters degree.

The number of years the respondents have been employed as a school counsellor is summarized in Table 2. It is noted that although most of the counsellors were 35 years of age and older, 46.3% had less than 6 years experience as a school counsellor. This most likely reflects the career path for school

counsellors in Newfoundland. They typically enter the profession following a number of years as a teacher and the subsequent completion of a masters degree in counselling.

Table 2

Years of Experience as a School Counsellor

Years	(N= 123)	(%) of School Counsellors
1-5		46.3
6-10		29.3
11 +		23.6
Missing data		.8
TOTAL		100%

Teaching and Other Related Duties

Fifty-two percent of the school counsellors surveyed indicated they were assigned some teaching duties. Of those with teaching responsibilities, 76.6% were assigned guidance related teaching duties (Career Education, Peer Counselling, Adolescence and Health). The remaining 23.4% of these counsellors were assigned non-guidance related subjects to teach.

Professional and Personal Experiences of School Counsellors

School counsellors were asked to reflect on their professional and personal experiences related to the issue of AIDS. Questions were related to their

educational and counselling experiences, perceptions of AIDS related counselling challenges, and the provision of AIDS educational activities in their respective schools. An overview of their responses to these questions is provided in the following section.

Educational Experiences

Of the school counsellors surveyed, 48.8% reported receiving some inservice on AIDS education at their school and/or school district level. On the other hand, 47.2% had not received any such continuing education at their school or school district level with 4.1% not responding to this item. Even fewer school counsellors (33.3%) had received AIDS education from other sources such as professional conferences (SCAN, CGCA). (See Table 3 for a brief summary). The responses to this question also indicate that 38.2% of the counsellors surveyed had received neither inservice education at their school/district level or professional conferences.

Table 3**Percentage of School Counsellors Receiving AIDS Related Educational Inservices**

(N = 123)			
Type of Inservice	(%) Yes	(%) No	(%)Missing
School and/or School District	48.8	47.2	4.0
Professional Conferences	33.3	63.4	3.3

Note: 38.2% of respondents indicated they had received neither of the above types of inservice education

Additional to inservice educational events at their school and professional conferencing level, school counsellors indicated they had experienced other educational opportunities with respect to AIDS education. Of the 54 responses given, 42.6% of these involved self education through reading, viewing documentaries related to AIDS. Other experiences included exposure to AIDS related information through graduate courses (14.8%), presentations by other professional (Doctors, Nurses) to staff/students (22.2%). Knowledge was also gained through contact with an HIV positive individual (20.4%). However, the majority of the counsellors, (64.2%) did not identify any AIDS related education experience beyond that received at school or conferences.

Table 4**Other AIDS Related Educational Experience (Total Responses = 54)**

Experience	(N = 54)	(%)
Self Education (Reading, Videos)		42.6
Graduate Courses		14.8
Contact With HIV Positive Individuals		20.4
Professional Presentations (Doctors, Nurses) at Staff Meetings.		22.2

Note: Respondents could give up to two responses.

Counselling Experience

School counsellors did indicate many of them are providing AIDS related counselling to students in their schools. Of the counsellors surveyed, 34.1% reported they have counselled students who were worried about being HIV positive, 37.4% had provided information to individual students on how to be tested for HIV, and 56.1% have provided specific information regarding the use of condoms as a way to prevent the spread of HIV. Only 3.3% of the counsellors surveyed have provided counselling to students who have been tested and found to be HIV-positive. Almost 18% indicated having referred students for HIV testing. Noted in Table 5, 33.3%

of the counsellors surveyed indicated they had not provided any of the above five types of counselling services to their students. Table 5 also provides a summary of the number of students to whom counsellors have estimated they provided these counselling services.

Other counselling experiences were cited by 13% of the respondents. A brief summary is provided in Table 6. Although the majority of the counsellors did not identify any counselling experience related to AIDS beyond those listed in Table 5, those who did, were mainly involved in AIDS related individual counselling with students who had a family member who was HIV positive or had died of AIDS (3.2%), students who needed individual counselling on AIDS related issues such as birth control (3.3%), and group counselling of students to provide general information on AIDS (3.3%). Parents and teachers were also provided counselling services related to AIDS (2.4%)

Table 5

AIDS Related Counselling Experiences by Percentage and Estimate of Number of Students Seen

Counselling	(%) Yes	(%) No	Missing	Estimated Number of Students
Provided specific information regarding condom use	56.1	41.5	2.4	1-50
Provided specific information on how to be tested for HIV	37.4	61.0	1.6	1-23
Counselled students worried about being HIV+	34.1	65.9	-	1-5
Referred students for HIV testing	17.9	82.1	-	1-5
Counselled students who have tested HIV+	3.3	95.9	.8	1

Note: 38.2% of the counsellors provided neither of the above counselling services to their students.

Table 6**Other Counselling Experience Related to AIDS**

Counselling Experience	(N = 123)	(%)
Counselling students whose family member has HIV/AIDS and/or has died.		3.2
Individual counselling re: related issues.		3.3
Group counselling for students to provide general information on AIDS.		3.3
Individual counselling re: AIDS with concerned parents and teachers.		2.4
Counselling of students who have now died of AIDS.		.8
No such experience identified		87.0

AIDS Related Counselling Challenges

The counselling challenges noted by school counsellors who have counselled students who are HIV positive (3.3%) are summarized in Table 7. They indicated that the most challenging aspect of these counselling relationships was having updated information related to AIDS/HIV (28.6%), helping students deal with the anxiety and fear related to being sick and possibly dying (28.6%), helping students

deal with feelings of isolation (14.3%), helping students accept their diagnosis (14.3%), and having limited time available to assist HIV positive students (14.3%).

Although these may not be unexpected challenges, it does underscore the magnitude and multifaceted nature of counselling students who are HIV positive. Information and its accuracy and potency for the person seeking and hearing it takes on an increased significance. It also requires that counsellors have the competencies and sufficient comfort level to engage in grief counselling and helping their clients deal with issues of fear, uncertainty, and isolation.

Table 7

AIDS Related Counselling Challenges of Counsellors Who Have Counsellor HIV Positive Students

Counselling Challenge	(Total Responses = 7)	(%)
Having updated information		28.6
Helping students deal with anxiety and fear related to sickness and death		28.6
Helping students deal with feelings of isolation		14.3
Helping students accept their diagnosis		14.3
Limited time available		14.3

Note: Respondents could give up to two responses.

The majority of school counsellors who responded to the survey had not counselled a student who was HIV positive. However they were asked about their perceptions of the counselling challenges they believed they would have to meet if they were to counsel a student who was HIV positive. Their responses were similar to those school counsellors who had counselled HIV positive students in that helping students cope with anxiety, fear and feelings of isolation related to being HIV positive were two aspects of such counselling which they believed would present them with some challenge. Table 8 provides a summary of these perceptions. One noticeable difference between those school counsellors who have counselled a HIV positive student and those who have not was the fact that the counsellors who had already faced this counselling challenge were concerned about having updated information on AIDS that would be helpful in the counselling situation. This need was not mentioned by the inexperienced group.

Table 8**Perception of AIDS Related Counselling Challenges**

Perceived Challenges	(Total Responses = 137)	(%) of Response
Helping students cope with anxiety and fear related to being sick and dying		32.8
Helping HIV positive students create a sense of purpose in life		21.3
Helping students cope with feelings of isolation		19.7
Issues related to further spreading		8.2
Feeling comfortable with someone HIV positive in a counselling situation		6.8
Coping with a new counselling experience		7.3
Finding a support group/services		3.9
Having time available to provide counselling		.7

Note: Respondents could give up to two responses.

Provision of AIDS Educational Activities for Students

School counsellors were asked to indicate whether or not their school has provided specific types of AIDS related educational activities to their students within the past two years. As can be seen from Table 9 the most common activity cited was the distribution of AIDS awareness print material to students (74.0%) and AIDS

being taught as part of the curriculum (70.7%). Presentations on AIDS to groups of students either by individuals in the medical profession (51.2%) and/or by the school counsellors in the classroom setting (48%) were also fairly common in the schools. Although to a lesser degree, other activities included guest speakers who have AIDS/HIV (36.6%) and AIDS Awareness Days (26.8%). A small percentage (1.6%) have provided support groups for students whose family members had AIDS/HIV. Other activities not listed in Table 9 but expressed in the comments of the counsellors can be found in Appendix C.

Table 9**Provision of AIDS Educational Activities for Students**

Activity	(%) Yes	(%) No
AIDS Awareness Print Material Distributed to Students	74.0	26.0
AIDS Education Taught as Part of Curriculum	70.7	29.3
AIDS Presentations By Medical Profession	51.2	48.8
Counsellor Prepared Classroom Session on AIDS	48.0	52.0
Guest Speaker Who Has AIDS/HIV.	36.6	63.4
AIDS Awareness Days	26.8	73.2
* Other	13.8	86.2
Support Group Whose Family Member Has AIDS/HIV	1.6	98.4

Note: (N = 123)

Perceived Level of Comfort

School counsellors were asked to reflect on their perceived level of comfort in five situations involving varying degrees of contact with HIV positive individuals. Table 10 provides a summary of their perceived levels of comfort. The responses indicate that most counsellors see themselves as feeling at least somewhat comfortable in these situations.

Table 10

Perceived Level of Comfort if in Contact with HIV Positive Individuals

Situation	(%)	Comfortable	Unsure	Uncomfortable	Missing
Being in the presence of a stranger who is HIV positive	76.4	13.0	9.8	0.8	
Being in the presence of someone you know who is HIV positive	86.1	3.3	9.8	0.8	
Shaking hands with someone HIV positive	80.5	7.3	11.4	0.8	
Playing basketball with someone HIV positive	62.6	15.4	21.1	0.8	
Embracing someone who is HIV positive	73.9	7.3	17.1	1.6	

Awareness of HIV Positive Individuals

School counsellors were asked if they knew of any individuals in their communities, or schools who were HIV positive and if so, what they believed to be the numbers of these HIV positive individuals. They were also questioned about whether or not they have had personal contact with a person who they knew was HIV positive. Table 11 provides a brief summary of the responses to these questions. Although almost half of the respondents (43.1%) stated they were aware of at least one HIV positive individual in their community and slightly more than half (52.5%) have had personal contact with a person whom they believed were HIV positive. Of those who have had this personal contact, 4.1% indicated it was a family member, 11.4% with an HIV positive friend, 22.8% an acquaintance, and 13.8% with other.

Table 11

Awareness of HIV Positive Individual

Individuals in the:	(%) Yes	(%) No	(%) Missing	Estimated Numbers
Community	43.1	54.4	2.4	1-150
School	1.6	96.8	1.6	1-3
Personal Contact	52.5	45.1	2.4	**

**** Respondents were asked to indicate if the persons whom they had personal contact was family, friend, acquaintance, or other.**

Experiences Affecting their Beliefs about AIDS

Table 12 summarizes the school counsellors' responses to the question regarding the experiences which they felt most affected their belief about AIDS. The most common experience cited was having direct contact with an HIV positive individual or a person whose family member had died of AIDS (24.6%). Other experiences included exposure to the mass media (18.5%), the attention given to the high rate of HIV infection in the Newfoundland region of Conception Bay North (15.4%), and exposure to speakers with HIV (15.4%).

Table 12**Experiences Affecting School Counsellors Beliefs About AIDS**

Experience (Total Responses = 130)	(%) of Responses
Direct contact with individuals who are HIV+, has AIDS, or family member has died of AIDS	24.6
Exposure to the mass media	18.5
Local Conception Bay North situation	15.4
Exposure to speakers with HIV	15.4
Statistics relating extent of HIV infection in NFLD	10.6
Exposure to video's depicting accounts of HIV+ personal experiences	3.1
Discussions with other professional re: AIDS	3.1
Announcements of being HIV+ by celebrities and/or sports figures	3.1
Statistics related to high levels of sexual activity of youth	3.1
No one specific experience	3.1

Note: Respondents could give up to two responses.

Changes in Beliefs

Respondents were asked to reflect on any of their beliefs about AIDS or people who have AIDS which they may have revised or changed. Table 13 summarizes the responses presented by those counsellors who answered the question. Forty percent of the 27 responses indicated a change in the belief that AIDS is a gay disease, and 25.9% changed their belief that AIDS can be contracted through casual contact.

Table 13

Changes in Beliefs

Changed Belief (Total Responses = 27)	(%) of Responses
AIDS is a gay disease	40.7
AIDS can be contracted through casual contact	25.9
AIDS is uncommon	11.2
Every HIV+ person develops AIDS	7.4
Only certain people have to worry about AIDS	7.4
People with AIDS look sick	3.7
AIDS victims have no rights and do not deserve support	3.7

Knowledge Level Related to AIDS

A 21 item knowledge section was designed to measure the AIDS related knowledge level of school counsellors. Each counsellor received a percentage correct score. Table 14 provides a summary of the scores obtained by the counsellors. Fifty-three percent of the counsellors had from 50% to 69% of the responses correct. Forty-two percent of the respondents scored in the high range of 71% correct or higher. Since the majority of the counsellors had less than 71% of the items correct, it seems fair to conclude that there are some gaps in their AIDS related knowledge.

Table 14

AIDS Related Knowledge Level of Counsellors by Percentage of Correct Responses

Category Level	Range of (%) Correct	(%) of Counsellors
Low	< 50	4.9
Medium	50-69	53.1
High	70-100	42.0

Note: Mean percentages with correct responses = 67%

Table 15 presents how knowledgeable counsellors were on each individual item of the knowledge section of the questionnaire. Each item was assigned to one of three categories: Statistical Knowledge; General Knowledge; and Transmission and Prevention.

Statistical Knowledge

The AIDS related statistical knowledge of school counsellors as a group is reflected in the percentage of counsellors who correctly answered the three items in this category. Sixty-eight percent of the counsellors knew that AIDS was not the leading cause of death among Canadians under the age of 25. A little more than 50% of the counsellors knew that the percentage of individuals who have died of AIDS were not teenagers. The one statistical item which more than 80% of counsellors answered incorrectly was the over estimation of HIV infection in Canada that was presented in item 13. The majority of counsellors incorrectly believed that 1% of the Canadian population is infected with the AIDS virus when actual statistics indicate the number to be closer to .01%. This misunderstanding may not be surprising given the high level of publicity and media attention given to AIDS. However, these results reflect that counsellors do have some gaps in statistical knowledge as it relates to AIDS.

General Knowledge Related to AIDS

The AIDS related general knowledge of counsellors was measured by determining their correct responses to seven items. Five of these seven items were answered correctly by the counsellors, in a range of 74% to 97% across the items. Only two general knowledge item were answered incorrectly by more than 50% of the counsellors (item 2 and 12). These items dealt with the average number of years

an AIDS victim survives after the symptoms first appear and the type of cells which are destroyed by the AIDS virus. Although most counsellors appear to have accurate general knowledge about AIDS, there appears to be some room for improvement.

Transmission and Prevention

The scores obtained on the transmission and prevention items of the knowledge section were inconsistent. Seventy-five percent of the counsellors correctly answered more than 50% of the 11 items in this section. However, there were three items which were scored incorrectly by more than 50% of the counsellors. These items (10, 18, 22) deal with transmission of the AIDS virus, this result therefore reflects a gap in the knowledge of 51% to 67% of the counsellors surveyed.

Table 15

Aids Related Knowledge of School Counsellors By Item and Percentage of Counsellors who Answered Each Item Correctly

Item # (N = 123)		
Statistical Knowledge		(%) Correct
6.	AIDS is the leading cause of death among Canadians under age 25. (False)	68.3
11.	Half of the individuals who have died of the AIDS virus are teenagers. (False)	51.2
13.	Approximately 1% of the Canadian population is infected with the AIDS virus. (False)	19.5
General Knowledge Related to AIDS		(%) Correct
1.	The AIDS virus is now called the human immunodeficiency virus. (HIV)(True)	87.8
2.	The AIDS virus weakens the immune system by destroying red blood cells. (False)	42.3
4.	A person can have the AIDS virus for seven or more years without having symptoms of illness. (True)	92.7
5.	There are blood tests to show if a person has been infected by the AIDS virus. (True)	97.6

Table 15 (continued)

		(%) Correct
7.	A person can be infected for up to six months before the AIDS virus can be detected. (True)	74.8
12.	On average an AIDS victim dies about two years after the symptoms first appear. (True)	33.3
20.	The early detection and treatment of AIDS can prolong the lifespan of the infected person. (True)	78.0
Transmission and Prevention		(%) Correct
3.	Men and women are equally likely to have serious problems if they contract the AIDS virus. (True)	91.9
8.	The AIDS virus can be spread from a female to her unborn child during pregnancy. (True)	99.2
9.	Condoms used with a spermicidal foam give effective protection from AIDS. (True)	78.0
10.	Females and males are equally at risk of catching the AIDS. (False)	16.3
14.	An individual who has had a recent blood transfusion stands a moderate chance of catching AIDS. (False)	87.0
15.	It has been documented that AIDS can be transmitted via french kissing. (False)	73.2

Table 15 (Continued)

		(%) Correct
16.	AIDS can be transmitted via oral intercourse. (True)	81.3
17.	The use of lambskin condoms as opposed to latex condoms decreases the chance of infection with AIDS. (False)	63.4
18.	Infected mothers can pass the AIDS virus to their babies while breast feeding. (True)	48.8
19.	The AIDS virus can be spread by coughs and sneezes. (False)	87.2
21.	All types of intercourse places an individual equally at risk of contracting the AIDS virus. (False)	33.3

Views and Attitudes

The views and attitudes of school counsellors were reflected in their responses to 28 statements. For each statement, counsellors were asked to indicate their level of agreement with each item. Items were divided into five categories: perceptions of self knowledge level related to AIDS; perception of students' knowledge level related to AIDS; attitudes regarding AIDS related policy issues; attitudes reflecting fear of HIV/AIDS infection; and general attitudes regarding the issue of AIDS. The counsellors responses are addressed in the following sections.

Perceptions of Self Knowledge Related to AIDS

Nearly all (87%) of the counsellors agreed that they needed to learn more about AIDS and more than one half of them were either unsure about their skill level or believed that they did not have the skills and knowledge to coordinate AIDS prevention education. See Table 16.

Table 16**Perception of Self Knowledge Related to AIDS**

Attitude	(%)	Agree	Not sure	Disagree	Missing
I need to learn more about AIDS		87.0	5.7	5.7	1.6
I have skills and knowledge to coordinate AIDS prevention education		43.9	26.0	28.5	1.6

Perceptions of Student Knowledge Related to AIDS

Two of the twenty eight items were designed to determine the counsellors' perception of their students' AIDS related knowledge level. Table 17 provides a summary of these views. Slightly more than 50% of the counsellors did believe that their students do not view AIDS as a homosexual disease, 22.8% were unsure and 24.4% were in agreement with this statement. Similar responses were provided to the statement about whether or not they viewed their students as having received sufficient instruction and information on AIDS. Forty-five percent viewed their students as receiving insufficient instruction and information, 20.4% indicated they were unsure, and 32.5% agreed with this statement.

Table 17**Perception of Student Knowledge Related to AIDS**

Attitude	(%)	Agree	Not sure	Disagree	Missing
Students view AIDS as a homosexual disease		24.4	22.8	51.2	1.6
Students receive sufficient instruction and information on AIDS		32.5	20.3	45.5	1.6

Attitudes Reflecting Fear of HIV/AIDS Infection

Of the school counsellors surveyed, 93.5% agree that AIDS is a serious problem. However, 81.3% are not worried about catching the AIDS virus. As for the restrictions they believe should or should not be placed on HIV infected individuals, 83.7% agree that people with AIDS should be allowed to teach in public schools. Fewer counsellors, 56.9%, agree with the same statement when it is applied to a different setting such as allowing people with the AIDS virus to work in hospitals. This setting appears to create caution in more of the counsellors. (See Table 18)

Table 18**Attitudes Reflecting Fear of HIV/AIDS Infection**

Attitude	(%)	Agree	Not sure	Disagree	Missing
People with AIDS should not be allowed to teach in public schools	5.7	8.9	83.7	1.6	
AIDS is not as serious a Problem as the media suggests	1.6	3.3	93.5	1.6	
I am worried about catching the AIDS virus	5.7	10.6	81.3	2.4	
People who have the AIDS virus should not be allowed to work in hospitals	11.4	30.1	56.9	1.6	
Some people will be infected by the AIDS virus no matter how they try to avoid it	22.8	11.4	64.2	1.6	
People who have the AIDS virus should not be allowed to immigrate to Canada	21.1	35.0	42.3	1.6	
People who have the AIDS virus should not be allowed to serve the public	11.4	18.7	68.3	1.6	

Attitudes Regarding AIDS Related Policy Issues

The views of school counsellors on items related to the issues surrounding HIV infection and confidentiality, HIV infected students and teachers' rights, and the responsibility of school boards as they address the issue of AIDS in the public schools are summarized in Table 19. The responses given to these items indicate that 92.7% of counsellors believe school boards are responsible for providing an educational program for those students infected with the AIDS virus and 91.9% agreed that boards should take appropriate steps to educate students, parents and school employees regarding AIDS and its transmission.

Regarding the issue of HIV testing and confidentiality, most of the school counsellors (94.4%) did not believe that teachers should be required to be tested for HIV and the majority of counsellors (77.2%) agreed that teachers should not tell other students about a classmates HIV-positive status. This may suggest that school counsellors, while being concerned about AIDS, are not so frightened as to abandon their long standing commitment to the principle of confidentiality.

Table 19**Attitudes Regarding AIDS Policy Issues**

Attitude	(%)	Agree	Not sure	Disagree	Missing
People who have the AIDS virus should be required to let other people know they have it		22.0	33.3	43.1	1.6
Students who have the AIDS virus should not be allowed to attend regular school classes	.8	4.9	92.7		1.6
Teachers should tell other students if a classmate has the AIDS virus	5.7	15.4	77.2		1.6
Teachers should teach their students about AIDS	94.3	2.4	1.6		1.6
All teachers should be required to be tested for the AIDS virus	.8	3.3	94.3		1.6

Table 19 (continued)

Attitude	(%)	Agree	Not sure	Disagree	Missing
School boards should take appropriate steps to educate students, parents and school employees regarding AIDS and its transmission	91.9	1.6	4.9	1.6	
School boards have a responsibility to provide an educational program for those students infected with the AIDS virus	78.0	12.2	7.3	2.4	
If a teacher tests positive for the AIDS virus, he or she should not be allowed to teach	5.7	9.8	82.9	1.6	
Every senior high school should have condom dispensers	56.9	22.8	19.5	.8	
A formal AIDS curriculum should be mandated	73.2	10.6	14.6	1.6	

Table 20**General Attitude Regarding the Issue of AIDS**

Attitude	(%)	Agree	Not sure	Disagree	Missing
People who have the AIDS virus are getting what they deserve		1.6	.8	95.9	1.6
In my experience most teachers want to learn more about AIDS	70.7		16.3	11.4	1.6
The advocacy that adolescents be advised to use condoms only serves to condone inappropriate sexual behaviour	4.9		4.9	88.6	1.6
Adolescents typically have the illusion that they are invulnerable and this allows them to deny the possible consequences of their sexual behaviour	91.1		2.4	4.9	1.6
If I were counselling a student with the AIDS virus who was sexually active, I would have an obligation to inform their sexual partner if they refused to do so	60.2		27.6	10.6	1.6

Aids Prevention Curriculum

Eighty-seven percent of the school counsellors surveyed did indicate that a formal AIDS prevention curriculum should be mandated. Table 21 provides a summary of the grades these respondents felt should receive such as a curriculum. Almost 50% (48.9%) of the counsellors surveyed suggested that this formal AIDS curriculum should be mandated for students before they enter junior high school.

Table 21

Counsellors' Perception of Grades in which AIDS Prevention Curriculum Should Begin

Grades	(N = 123)	(%) of School Counsellors
K-3 or Higher		15.5
4-6 or Higher		33.4
7 or Higher		37.8
Missing Data		13.3

General Comments and Recommendations

The questionnaire was designed to provide the responding school counsellors with an opportunity to share any additional experiences or beliefs about AIDS which were not addressed in the questionnaire. Of the 123 respondents, 42 took the opportunity to provide any additional comments. These comments are provided verbatim in Appendix D.

In general, the comments offered by the school counsellors reflected a number of themes, including the following:

- accurate updated AIDS educational information needs to be provided to students and as part of the professional development of teachers.
- a more open, honest, and effective approach to sex education, with AIDS included as part of this curriculum, is needed in our schools.
- AIDS education needs to be designed to not only prevent further transmission of the virus but to also promote empathy toward those now infected.
- Students not only need information about safer sex and abstinence, they need access to condoms.
- Completing a questionnaire which addresses AIDS knowledge, attitudes and related issues increased self awareness and provided a focus for needed improvement.
- The most effective AIDS educational program for youth must provide not only facts about AIDS but must be delivered in such a way as to positively affect the risk taking behaviour of adolescents.
- Promoting and encouraging students to empathize with HIV infected individuals may not only increase tolerance and awareness of human suffering but also improve their ability to make decisions that would more likely result in less risk taking.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

School counsellors, as a unique group of professionals within the public school system, are continuing to develop guidance programs which best meet the needs of the population of students they serve. In the era of the AIDS epidemic, counsellors are being faced with the urgent need to counsel and educate their students about the risk of AIDS and how to protect themselves against infection. Furthermore, as the epidemic spreads, students who are already infected or who have a close relationship with someone who is HIV-positive will need support and counselling to best cope with this life crisis.

The school counsellors surveyed for this study were employed in the urban and rural areas of Newfoundland and Labrador with slightly more counsellors serving the former. The majority of the counsellors were over the age of 35, had completed a masters degree, and had been employed as a school counsellor for less than 11 years. More than half were assigned some teaching duties additional to their counselling responsibilities.

The counsellors who participated in this study indicated the level of AIDS related education and training they had received. Half of them indicated they had received inservice education at their school/district level and one third report having attended AIDS related sessions at professional conferences. These results indicate that half of the counsellors surveyed did not receive any AIDS inservice education

from their own school or school boards where it would seem to be the most obvious level at which AIDS education would be identified and addressed. This study also identified counsellors who had not received any formal AIDS education, and it does appear, based on these findings, that school boards have thus far met the AIDS educational needs of half the school counsellors across the Province. It is clear from this study that insufficient attention is being given to the in-service needs of school counsellors with respect to AIDS education. From what school counsellors have reported, it appears that AIDS education is in need of increased priority within the education system of Newfoundland and Labrador.

Although most school counsellors in this study have not yet provided direct counselling services to students with concerns about AIDS, a significant number of them report substantial involvement. Thirty-four percent (42) of them have counselled students who were personally concerned about AIDS and approximately 18% (22) have had the experience of referring a student for HIV testing. Three percent (4) of the counsellors in this study have had the challenging responsibility of counselling students who have tested HIV-positive with more than half of the counsellors indicating they have provided students with specific information regarding condom use.

Counsellors in this study were asked to identify the type of experiences which they believed had the most powerful impact on their belief about AIDS. The most common cited experiences referred to by approximately one fifth of the counsellors

were direct contact with an HIV-positive individual, working with a person whose family member had died of AIDS related illness, AIDS programs in the mass media, the attention given to the Conception Bay North HIV infection statistics, and exposure to a HIV-positive speaker. From what some counsellors have indicated in this study, it seems reasonable to infer that direct personal exposure to HIV positive individuals is a potent learning experience. There is the suggestion that such experiences may enhance empathy for those with AIDS as well as having the potential to positively effect attitudes. Although these results must be interpreted cautiously, the awareness of the potency of these types of experiences may be useful in developing AIDS educational programming for counsellors as well as students in our public schools.

School counsellors surveyed did indicate their assessment of the degree to which their school(s) is/are attempting to meet the needs of their students as they relate to AIDS prevention education and counselling. They reported that various types of AIDS related educational activities are being provided to students across Newfoundland and Labrador. The majority of counsellors indicate that their schools are distributing AIDS awareness print material, and the topic of AIDS is being addressed as part of the regular curriculum. Close to half of the counsellors have invited medical professionals into their schools to offer an AIDS related presentation to groups of students and counsellors are gathering information and providing these types of presentation to student themselves. Slightly more than one third have

invited an HIV-positive speaker to address their students. This is interesting since many counsellors indicated just how powerful this type of experience was in changing their beliefs about AIDS. Scollay and her associates (1992) suggests that this is an effective intervention for improving AIDS related attitudes and knowledge levels of the audience. This type of intervention may need to be utilized more often.

Although the majority of the counsellors surveyed have not counselled an HIV-positive student, more than one third have provided students with specific information on how to be tested for HIV with more than half having provided students whom they are counselling with specific information regarding condom use. Most counsellors did indicate they are counselling students who are worried about being HIV-positive and they also believe they need to learn more about AIDS. When asked to indicate their perceptions of the challenges they would expect to have difficulty with if they were to counsel a HIV-positive individual, most often cited helping students cope with the fear and anxiety related to being sick and the threat of death. Other research in the area of counselling the HIV-positive client (Hayes et al, 1993; St. Lawrence et al, 1990) underscore the importance of developing continuing education programs to prepare counsellors to deal with persons affected by AIDS. Counsellors providing services to individuals who are HIV-positive may need specific AIDS related counselling skills, which could possibly be learned through their counsellor education program or through the initiatives taken by their school boards.

Of the small number of counsellors who have counselled HIV-positive students, almost one third stated that having updated information on AIDS was one of the challenges they faced as they attempted to meet the counselling needs of their HIV-positive students. Information regarding the AIDS epidemic can change rapidly, and a large number of counsellors are providing specific information to students, with only half indicating they have received formal AIDS related training. Therefore, it will be important for school boards to ensure their school counsellors have updated information on a regular basis.

The comfort level of a counsellor in the counselling situation is considered an important factor which can either facilitate or interfere with the counselling relationship, (Campos, Brasfield, and Kelly, 1989). In this study, counsellors surveyed did indicate they perceived themselves as being at least somewhat comfortable in the presence of an HIV-positive individual. Direct contact, such as embracing or shaking hands with a HIV-positive individual, also elicited a perceived level of comfort, with slightly more counsellors indicating they would feel more comfortable with someone they knew who had AIDS than with a stranger. These results are promising in terms of the basic prerequisite for rapport building needed by school counsellors in a counselling relationship which involves an HIV infected person.

School counsellors reported moderate to high levels of AIDS knowledge. The overall average score of the respondents was 67% correct, consistent with the results reported by Carney (1994) in his study of the knowledge level of counsellors in

training. It is surprising that counsellors in the present study, who have had counselling experience, have completed a graduate degree in counselling, and have received some AIDS education, appear to be no more knowledgeable than the counsellors in training as reported in Carney's study (1994). Maybe the graduate students in this study are just as well informed because of the recency of their public school education, which was likely to have included some AIDS education. Also, it may reflect the general knowledge of younger people faced with the threat of this challenging disease.

Furthermore, the results across the various knowledge categories indicates that school counsellors in Newfoundland and Labrador do have some AIDS related knowledge deficits related to (1) the prevalence of infection and related statistical information, (2) specific information regarding length of illness before death of a person with full blown AIDS, (3) the type of cells destroyed by HIV, (4) the equality of risk for males and females, (5) the transmission of HIV to infants from their breastfeeding mothers, and (6) the different levels of risk associated with the various types of sexual intercourse. Given the extent of the errors on these types of knowledge items, further consideration appears to be needed with regards to addressing these knowledge gaps, especially knowledge related to transmission and prevention. Due to the importance of having accurate AIDS information, counsellor educational programs and school boards may find it useful to explore how best to improve the AIDS educational programs offered to counsellors and teachers by first

administering an AIDS knowledge level instrument similar to the knowledge section utilized in the questionnaire developed for this study. This would provide specific information regarding the types of information needed by professionals working in their school system.

The overall attitudes of school counsellors as they relate to AIDS and AIDS education was quite positive and consistent with similar studies conducted by other researchers (Carney et al 1994; Scollay et al, 1992; St. Lawrence et al, 1990). However, the attitudes of school counsellors in this study reflect a number of concerns and could offer some insight into how to improve AIDS education within the public school system.

The majority of school counsellors not only indicated they believed they needed to learn more about AIDS but they also lacked confidence in their ability to coordinate AIDS prevention education within their schools. Almost half of those surveyed were not confident that their students received sufficient instruction and information on AIDS, yet the majority believed that school boards have a responsibility not only to educate students, teachers, parents and school employees about AIDS but also to provide an educational program for HIV infected students.

The issue of confidentiality and preserving the rights of HIV-positive students and teachers was considered important by school counsellors and consistent with the ethical guidelines expected of professional counsellors. However, more than half of the counsellors surveyed did indicate that they believed they had an obligation to

inform the partners of sexually active HIV-positive students who refused to inform their partners of their HIV positive status. This responsibility is addressed in the ethical codes for counselling as the "duty to warn". It is a challenging concept which is receiving increasing attention with respect to clients who are HIV-positive.

The counsellors' views related to their fear of HIV infection varied. The majority agreed that AIDS is a serious problem but they are not personally worried about contracting HIV, and hold the view that professional restrictions should not be placed on people with AIDS in the teaching profession. Fewer agree that restrictions not be placed on those HIV infected who are employed in hospitals. It is understandable that more restrictions are advocated for those who work in hospitals since it is an environment where the opportunities for infection may be greater.

In summary, this study can report the following findings with respect to school counsellors, in the public school systems throughout Newfoundland and Labrador:

- school counsellors demonstrated a moderate to high AIDS related knowledge level with some specific deficits.
- school counsellors are employed in schools which are providing their students with AIDS educational activities
- fifty percent of school counsellors have received some form of AIDS related educational experience at their school district level.
- thirty-eight percent of school counsellors surveyed have received no formal AIDS educational experience.

- school counsellors generally have not provided counselling to HIV-positive students.
- school counsellors are concerned about how to best meet the challenge of possibly counselling HIV-positive students.
- school counsellors are presently addressing AIDS related counselling issues (condom use, HIV-testing) with their students. Including:

Thirty-four percent have counselled students who were personally concerned about AIDS.

Eighteen percent have referred students for HIV testing.

Three percent have counselled students who have tested HIV-positive.

Thirty-three percent have not provided any of the above types of AIDS related counselling to their students.

- school counsellors perceived themselves as needing to learn more about AIDS and believed they would feel at least somewhat comfortable in the presence of a HIV-positive individual.
- most commonly cited direct contact with HIV-positive individuals and exposure to the mass media as the experiences which has affected their belief about AIDS.
- school counsellors generally believed that AIDS prevention curriculum should most certainly be provided to students at the junior high level with

a considerable number of counsellors indicating that this curriculum should commence at the elementary level.

- school counsellors believed school boards have a responsibility to educate students, parents and school employees about AIDS.
- school counsellors consider confidentiality to be an important issue with respect to persons who are HIV infected. However, there appeared to be some support for 'duty to warn' principle which would obligate counsellors to warn the sexual partners of HIV infected students.

The recommendations generated from these findings may be summarized as follows:

- school boards within the Province of Newfoundland and Labrador should increase their effort to provide ongoing inservice and educational opportunities to school counsellors about AIDS/HIV infection.
- Counsellor Education Programs should not only provide AIDS related factual information to their graduate students but should also focus on counselling techniques and programming specific to AIDS education.
- School counsellors have a professional responsibility to seek out educational opportunities which will enhance their understanding of AIDS and further develop their ability to work with students on issues related to AIDS both individually, and on a school and community wide basis.

- Other AIDS educational research and personal experience cited by counsellors has indicated that providing individuals (ie. students) with the opportunity to listen and relate directly with a HIV-positive individual is both a powerful and beneficial learning experience with the potential to change attitudes. Providing this type of experience at the school/school district level should be encouraged.

Finally, it is clear that because HIV and AIDS continue to pose an increasing concern in our society, school counsellors will be confronting HIV and AIDS related issues both directly and indirectly much more frequently. The current study provides both evidence of the need for HIV/AIDS education and suggestions as to how AIDS educational programs can be designed to best meet the needs of our youth and school counsellors who are responsible for counselling and supporting their students. An educational program that incorporates knowledge and exploration of attitudes will not only better enable counsellors to provide accurate information regarding AIDS related counselling but will also expand their own awareness and attitudes. The desired result would be AIDS educational programs designed to best meet the needs of our youth and the professionals who are committed to working with them.

References

- Avalon Consolidated School Board. (1993). Healthy, responsible living, STDS/AIDS policy and procedures. Adopted April, 1993.
- Barth, R.D. (1989). Reducing the risk: building skills to prevent pregnancy. Santa Cruz, CA: Newwork Publications.
- Bayer, R. (1989). AIDS, privacy and responsibility. *DAEDALUS*, 118, 79-99.
- Campos, P.E., Brasfield, T.L. & Kelly, J.A. (1989). Psychology training related to AIDS: Survey of doctoral graduate programs and predoctoral internship program. *Professional Psychology: Research and Practice*, 20, 214-220.
- Canadian Guidance and Counselling Association. (1989). Guidelines for ethical behaviour. Ottawa, Referenced Author.
- Carney, J., Werth, J.L., Emmanuelson, G. (1994). The relationship between attitudes toward persons who are gay and persons with AIDS, and HIV and AIDS knowledge, *Journal of Counselling and Development*, 72, 646-650.
- Casey, J. (1995). Province's youth at risk for health-related problems. *Department of Education, Newsletter*, 8, 7-8.
- Centre for Disease Control (1991, Dec). HIV/AIDS Surveillance Report. Atlanta, G.A.: Author.
- Centers for Disease Control. (1988, January). Guidelines for effective school health education to prevent the spread of AIDS. *Morbidity and Mortality Weekly Report*, 37, S-2.
- Croteau, J.M., Nero, C.I., and Johnson-Prosser, D. (1993). Social and cultural sensitivity in group specific HIV and AIDS programming. *Journal of Counselling and Development*, 71, 290-296.
- Department of Education, Government of Newfoundland and Labrador. (1988). Guidelines for the development and delivery of guidance services.
- Department of Education, Government of Newfoundland and Labrador. (1994). Education Statistics. Elementary - Secondary 1993-94.

- Department of Health, Government of Newfoundland and Labrador. (1994). HIV and AIDS Provincial Statistics 1984-December 31, 1994. Disease Control and Epidemiology Division.
- Department of Health, Government of Newfoundland and Labrador. (1989). Canada, Youth, and AIDS Study. Newfoundland Report.
- Douce, L.A. (1993) AIDS and HIV: Hopes and challenges for the 1990's. Journal of Counselling and Development, 71 (3), 259-260.
- Douglas, C.J., Kalman, D.M., and Kalman, J.P. (1985). Homophobia among physicians and nurses: an empirical study. Hospital and Community Psychiatry, 36, 1309-1311.
- Dworkin, S.H., and Pincu, L. (1993). Counselling in the era of AIDS. Journal of Counselling and Development, 71, 275-281.
- Feldman, D.A. (1989). Gay youth and AIDS. Journal of Homosexuality, 17, 185-193.
- Fennel, R. (1990). Knowledge, attitudes, and beliefs of students regarding AIDS. A review. Health Education, 21, 20-26.
- Gray, L.A., and House, R.M. (1989). AIDS and adolescents. In D. Capuzzi and D. Gross (Eds.) Working with at risk youth: Issues and Interventions (pp. 231-270). Alexandria, V.A.: American Association for Counselling and Development.
- Goertzel, T.G., and Bluebond-Langer, M. (1991) What is the impact of an AIDS education course? Journal of American College Health, 40, 87-94.
- Harris, J.E. (1987). The AIDS epidemic: Looking into the 1990's. Technology Review, 90, 59-64.
- Harris, L. and Associates. (1986). American teens speak: Sex, myths, T.V., and birth control. In the Planned Parenthood poll. New York: Author.
- Harding, A.K., Gray, L.A. and Neal, M. (1993) Confidentiality limits with clients who have HIV: A review of ethical and legal guidelines and professional policies, Journal of Counsellors and Development, 71, 297-305.

- Hofert, S.L., and Hayes, C.D. (Eds.). (1987). Risking the future. Adolescent sexuality, pregnancy, and childbearing. (Vol. 2) Washington, D.C. National Academy Press.
- House, R.M., and Walker, C.M.(1993). Preventing AIDS via education. Journal of Counselling and Development, 71, 282-289.
- Katz, T., Hass, G., Parisi, N., Astone, J., McEvaddy, D., and Lucido, D.J. (1987). Lay people's and health care personnel's perceptions of cancer, AIDS, cardiac, and diabetic patients. Psychological Reports, 60, p.615-629.
- Keeling, R.P. (1988) Effects of AIDS on young Americans. Medical Aspects of Human Sexuality, 21 (9), 22-33.
- Kegeles, S.M., Adler, N.E. and Irwin, C.E. (1988). Sexually active adolescents and condoms: Changes over one year in knowledge and attitudes. American Journal of Public Health, 78, 460-461.
- Kelly, J.A., St. Lawrence, J.S., Hood, H.V., Smith, S. and Cook, D.J. (1988). Nurses attitudes toward AIDS. Journal of Continuing Education in Nursing, 19, 78-83.
- Kirby, D., Barth, R.P., Leland, N.L., and Fetro, J.V. (1991). Reducing the risk: impact of a new curriculum on sexual risk taking. Family Planning Perspectives, 23, 253-263.
- Leland, N.L. and Barth, R.P. (1993). Characteristics of adolescents who have attempted to avoid HIV and who have communicated with parents about sex. Journal of Adolescent Research 8 (1), 58-76.
- Levine, C. (1991). Commentary: AIDS prevention and education: Reframing the message. AIDS Education and Prevention, 3(2), 147-163.
- Norusis, M.J. (1993). SPSS for Windows: Professional Statistics V.6.O. Chicago: SPSS Corporation.
- O'Connor, M.F. (1992). Psychotherapy with gay and lesbian adolescents. In S.H. Dworkin and F.J. Gatierez (Eds.) Counselling gay men and lesbians. Journey to the end of the rainbow, pp. 2-21.

- Ostrow, D.G. (1989). AIDS prevention through effective education, Daedalus, 118(3), 229-253.
- Rosenfeld, E. (1990). AIDS and health promotion: some ethical issues. Health Promotion, summer, 8-10.
- Roscoe, B., and Kruger, T.L., (1990). AIDS: late adolescents' knowledge and its influence on sexual behavior. Adolescence, 25, 39-48.
- Royse, D., Dhooper, S.S. and Hatch, L.R. (1987) Undergraduate and graduate students' attitudes towards AIDS, Psychological Reports, 60, 1185-1186.
- Scollary, P.A., Doucett, M., Perry, M., and Winterbottom, B. (1992). AIDS education of college students: The effect of an HIV-positive lecturer. AIDS Education and Prevention, 4 (2), 160-171.
- Sexuality, AIDS, and Decision Making: A study of Newfoundland Youth (1992). St. John's: Queens Printer. (A joint Project of the Department of Education and Memorial University's Department of Social Work)
- Skills for Healthy Relationships: A program about sexuality, AIDS and other STD (1993). The corporation of Council of Ministers of Education, Canada.
- Staff (1988, April). Experts fear AIDS to spread in teen population. Sexuality Today, p.6.
- St. Lawrence, J.S., Kelly, J.A., Owen, A.D., Hogan, I.G. and Wilson, R.A. (1990). Psychologists attitudes toward AIDS. Psychology and Health, 4, 357-365.
- Tonks, D. (1993). Can you save your students' lives? Educating to prevent AIDS. Educational Leadership, 50(4), 48-51.
- World Health Organization (1994). Global Program on AIDS update: AIDS cases reported to surveillance, forecasting and impact assessment unit (SFI).
- Zelnick, M. (1983). Sexual activity among adolescents: Perspective of a decade. In E.R. McAnarey (Ed.) *Premature adolescent pregnancy and parenthood* (pp. 21-31). New York: Grune and Stratton.

Appendix A

SECTION A

PLEASE INDICATE THE APPROPRIATE INFORMATION FOR EACH OF THE FOLLOWING ITEMS:

1. FEMALE __ MALE __
2. AGE __
3. PLEASE INDICATE THE HIGHEST DEGREE YOU HAVE COMPLETED TO DATE: (ie. B.A., M.ED.) _____
4. PLEASE INDICATE THE NUMBER OF YEARS YOU HAVE BEEN EMPLOYED AS A SCHOOL COUNSELLOR _____
5. OTHER RELATED DUTIES: (ie: ED. THERAPY) _____
6. AS THE SCHOOL COUNSELLOR, ARE YOU ASSIGNED TEACHING DUTIES?
YES __ NO __

IF YOU HAVE ANSWERED "YES" TO QUESTION 6, THEN PLEASE ANSWER QUESTION 7. IF NOT. GO TO QUESTION 8.

7. INDICATE THE GRADE(S) AND SUBJECT(S) WHICH YOU ARE TEACHING THIS YEAR:

GRADE(S)	SUBJECT(S)

8. WHAT IS THE APPROXIMATE POPULATION OF THE COMMUNITY OR COMMUNITIES IN WHICH YOU WORK?

1. ____ 2. ____ 3. ____ 4. ____

9. WHAT IS THE ENROLLMENT OF THE SCHOOL(S) IN WHICH YOU WORK?

1. _____ 2. _____ 3. _____ 4. _____

10. INDICATE THE GRADES TAUGHT IN THE SCHOOL(S) IN WHICH YOU WORK? (ie. k-12)

1. _____ 2. _____ 3. _____ 4. _____

SECTION B

PLEASE INDICATE YOUR RESPONSE TO THE FOLLOWING QUESTIONS:

1. Check any of these AIDS education activities which are presently or have been previously made available to the students in your school(s) during the last 2 years:

1. ☐ AIDS Awareness Day.
2. ☐ Guest speaker who has AIDS/HIV.
3. ☐ AIDS presentation by guests in the medical profession.
4. ☐ Counsellor prepared classroom sessions on AIDS.
5. ☐ AIDS awareness print material distributed to students.
6. ☐ Support group for students whose family member has AIDS.
7. ☐ AIDS education is taught as part of the curriculum.
8. ☐ Other, please describe: _____

2. Indicate which of the following statements reflect your professional experience as a School Counsellor: (Indicate **approximate** numbers in the space ___ below)

	YES	NO
I have counselled student(s) who were worried about being HIV positive. If yes, how many ____.	___	___
I have provided students who I have counselled with information on how to be tested for HIV. If yes, how often ____.	___	___
I have provided specific information regarding the use of condoms as a way to prevent the spread of AIDS. If yes, how often ____.	___	___
I have counselled student(s) who have been tested and have been found to be HIV positive. If yes, how many ____.	___	___
I have referred student(s) for HIV testing. If yes, how many ____.	___	___
Other AIDS/HIV counselling experiences not listed above. (Please briefly explain)		

3. Have you attended any of the following activities related to AIDS prevention education:

	YES	NO
Inservice on AIDS education at your School or School district level.	—	—

Inservice on AIDS education at other professional conferences (ie. SCAN, CGCA.).	—	—
--	---	---

Please give a brief comment on the usefulness of any of the AIDS related educational experiences which you have identified above:

If the above, do not characterize your AIDS related educational experiences, please describe other AIDS related educational experiences additional to those covered above:

4. If you have counselled a student(s) who is HIV positive, what has been the most challenging aspect of this counselling relationship/process?

5. If you have not counselled a student(s) who is HIV positive, what do you think would be the biggest challenge for you, if you were to do so?

6. To date, what has been the experience which has most effected your beliefs about AIDS and drew your attention to the reality of it in our society. (including your attitude toward AIDS education)?

7. Choose the number that best reflects your perceived level of comfort in the following situations:

1=VERY COMFORTABLE 2=SOMEWHAT COMFORTABLE 3=UNSURE 4=SOMEWHAT UNCOMFORTABLE 5=VERY UNCOMFORTABLE

Being in the presence of a stranger who
is HIV positive 1 2 3 4 5

Being in the presence of someone you know
who is HIV positive 1 2 3 4 5

Shaking hands with someone HIV positive 1 2 3 4 5

Playing a game of basketball with someone
HIV positive 1 2 3 4 5

Embracing someone who is HIV positive 1 2 3 4 5

8. To the best of your knowledge, are there individuals in the community/communities in which you work who have tested HIV positive? Yes ___ No ___ If yes, please indicate what you understand to be the number of such persons:

9. To the best of your knowledge, are there individuals in the school(s) in which you work who have tested HIV positive? Yes ___ No ___ If yes, please indicate whether they are students, teachers, others and the approximate number of each:

10. To the best of your knowledge, have you had any personal contact with any person(s) who is HIV positive? Yes ☐ No ☐ If yes, please indicate in what capacity (ie. family, friend, acquaintance, other)

SECTION C

PLEASE INDICATE YOUR VIEW OF THE FOLLOWING STATEMENTS BY CIRCLING THE NUMBER WHICH BEST REPRESENTS YOUR RESPONSE.

TRUE = 1

FALSE = 2

3 = NOT SURE

1. The AIDS virus is now called the human 1 2 3
immunodeficiency virus (HIV).
2. The AIDS virus weakens the immune system by 1 2 3
destroying red blood cells.
3. Men and women are equally likely to have serious 1 2 3
problems if they contract the AIDS virus.
4. A person can have the AIDS virus for seven or 1 2 3
more years without having symptoms of illness.
5. There are blood tests to show if a person has 1 2 3
been infected by the AIDS virus.
6. AIDS is the leading cause of death among 1 2 3
Canadians under age 25.
7. A person can be infected for up to six months 1 2 3
before the AIDS virus can be detected.
8. The AIDS virus can be spread from a female to 1 2 3
her unborn child during pregnancy.
9. Condoms used with a spermicidal foam or gel 1 2 3
give effective protection from AIDS.
10. Females and males are equally at risk of 1 2 3
catching AIDS.
11. Half of the individuals who have died of the 1 2 3
AIDS virus are teenagers.

12. On average an AIDS victim dies about 2 years 1 2 3
after the symptoms first appear.
13. Approximately 1% of the Canadian population is 1 2 3
infected with the AIDS virus.
14. An individual who has had a recent blood 1 2 3
transfusion stands a moderate chance (50/50)
of catching AIDS.

TRUE = 1 FALSE = 2 3 = NOT SURE

15. It has been documented that AIDS can be 1 2 3
transmitted via "french" kissing.
16. AIDS can be transmitted via oral intercourse. 1 2 3
17. The use of lambskin condoms as opposed to latex 1 2 3
condoms decreases the chance of infection with
AIDS.
18. Infected mothers can pass the AIDS virus to 1 2 3
their babies while breast-feeding.
19. The AIDS virus can be spread by coughs or 1 2 3
sneezes.
20. The early detection and treatment of AIDS can 1 2 3
prolong the lifespan of the infected person.
21. All types of intercourse (anal, vaginal and 1 2 3
oral) places an individual equally at risk of
contracting the AIDS virus.

SECTION D

FOR EACH STATEMENT BELOW, PLEASE CIRCLE ONE (1) NUMBER WHICH REPRESENTS YOUR PARTICULAR POINT OF VIEW.

1=STRONGLY AGREE 2=AGREE 3=NOT SURE 4=DISAGREE 5=STRONGLY DISAGREE

1. I need to learn more about AIDS. 1 2 3 4 5
2. In my experience, students in my school(s) 1 2 3 4 5
continue to view AIDS as a homosexual disease.
3. People who have the AIDS virus should not be 1 2 3 4 5
allowed to teach in public schools.
4. AIDS is NOT as serious a problem as 1 2 3 4 5
televisions, radio and newspapers suggest.
5. I am worried about catching the AIDS virus. 1 2 3 4 5
6. People who have the AIDS virus should not be 1 2 3 4 5
allowed to work in hospitals.
7. People who have the AIDS virus are getting 1 2 3 4 5
what they deserve.
8. People who have the AIDS virus should be 1 2 3 4 5
required to let other people know they
have it.
9. Some people will be infected by the AIDS 1 2 3 4 5
virus no matter how they try to avoid it.
10. People who have the AIDS virus should not 1 2 3 4 5
be allowed to immigrate to Canada.
11. Students who have the AIDS virus should not 1 2 3 4 5
be allowed to attend regular school classes.
12. People who have the AIDS virus should not be 1 2 3 4 5
allowed to serve the public (e.g., waiter,
chef, hair stylist).

13. Teachers should not be required to work with 1 2 3 4 5
students who have the AIDS virus.
14. Teachers should tell other students if a 1 2 3 4 5
classmate has the AIDS virus.
15. In my experience, most teachers want to learn 1 2 3 4 5
more about AIDS.
16. Teachers should teach their students about 1 2 3 4 5
AIDS.
17. The advocacy that adolescents be advised to 1 2 3 4 5
use condoms only serves to condone
inappropriate sexual behavior.
18. All teachers should be required to be tested 1 2 3 4 5
for the AIDS virus.
19. School Boards should take appropriate steps 1 2 3 4 5
to educate students, parents, and school
employees regarding AIDS and its transmission.
20. School Boards have a responsibility to 1 2 3 4 5
provide an educational program for those
students who are infected with the AIDS virus.
21. If a teacher tests positive for the AIDS 1 2 3 4 5
virus, he or she should not be allowed to
teach.
22. A formal AIDS prevention curriculum should be 1 2 3 4 5
mandated.
If you agree, please indicate grade(s) which you
feel should receive such a curriculum:

23. Adolescents, typically have the illusion 1 2 3 4 5
that they are invulnerable and this allows
them to deny the possible consequences of
their sexual behavior.

24. If I were counselling a student with the AIDS 1 2 3 4 5
virus who was sexually active, I would have
an obligation to inform his/her sexual partner(s)
if he/she refused to do so.
25. I feel that students in my school(s) receive 1 2 3 4 5
sufficient instruction and information on
AIDS prevention.
26. I feel I have adequate skills and knowledge 1 2 3 4 5
to coordinate AIDS prevention education in
the school(s) in which I have been assigned
School Counselling duties.
27. Every Senior High School should have condom 1 2 3 4 5
dispensers in the school washrooms.
28. Has there been a belief about AIDS or about 1 2 3 4 5
people who have AIDS, which you have had to
revise or otherwise change? Yes ___ No ___
If yes, which belief(s)

Although you are not obligated to do so, should you wish to share any of your experiences or beliefs about AIDS which would be additional to the responses expressed above, please feel free to do so in the space below.

Appendix B

I am a graduate student in the Educational Psychology Programme, Faculty of Education, at Memorial University. I am currently conducting a thesis study investigating the experiences, beliefs and needs of school counsellors as they relate to the issue of AIDS and AIDS education.

The intention of this exploratory study is to acquire information which may assist school boards and other agencies and departments in developing AIDS awareness/Prevention Education in the public schools.

School counsellors have been selected for this study because they are in a unique position to acquire the information relating to AIDS and AIDS education. It is for this reason that we are inviting you to participate in this study and to share with us your thoughts, and experiences about how the issue of AIDS is being addressed in your school(s) and to share some of your insight on areas which could be improved.

If we receive your reply before **May 30**, you will be eligible for a draw to win one of the following prizes:

1st prize: \$75.00 2nd prize: \$50.00 3rd prize: \$25.00

You can be reassured that your reply will be treated in confidence: your response will be combined with the responses from others so that your anonymity will be protected. There is no request for your name on the questionnaire, only a code number will be assigned to your questionnaire for a statistical analysis. Please fill in the questionnaire as completely as possible; however you are free to decline answering any question you wish. Completion time for other individuals range from **20 to 40 minutes**. Thank you for your assistance in this research.

If you have any questions, please contact Dr. Stephen Norris at the address or phone number below. A summary of the research findings can be mailed to you if you wish.

Ms. Cindy Rose
Graduate Student
753-3858

Dr. Glenn Sheppard
Supervisor
737-8622

Dr. Stephen Norris
Acting Associate Dean
Research and Development
Faculty of Education
G.A. Hickman Building
Memorial University of Newfoundland,
St. John's, NF.
A1C 3X8
Phone: (709) 737-3402

Appendix C

Other AIDS Education activities, as cited by participating school counsellors, as presently or having previously been made available to the student enrolled in their schools:

- Presentation by the Newfoundland AIDS Committee.
- Students researching the topic of HIV/AIDS and presenting the information to their peers.
- Formation of a school based AIDS committee involving students, nurse, and school counsellor.
- Small groups of students accompanied the school counsellor to a workshop on AIDS.
- Peer helpers trained in the area of HIV/AIDS education and active in the school population.
- School wide scheduling of exposure to AIDS related videos and print material.

Appendix D

Written comments provided by 42, of the 123 school counsellors who responded to the questionnaire.

"Personally, I do not believe AIDS education should become another compulsory curriculum area. Including it as an aspect of already established sex education courses is sufficient. I also feel however that our societies sex education attitudes are too prudish and need to be broached earlier and be more innovative, natural and informal than current practice. We try to deal with modern issues in a Victorian atmosphere!"

* * *

"I have not counselled any students who have been exposed to AIDS."

* * *

"While attending an AIDS workshop last year with a group of students, I was surprised to find what a problem it is in Nfld. My high school students wanted to do something in our school (R.C.) To promote awareness, but we were given the idea that it would be discouraged. A high school student from a neighbouring R.C. school, told us that she had made an AIDS awareness display in her high school, which the administration made her take down!"

* * *

"The students that I talk to in our school are very well informed about the AIDS virus and AIDS itself. Whether students use this information to make wise decisions regarding sex is really beyond our control."

* * *

"AIDS, although a major threat to life, is still a disease that is not encountered by a large proportion of the population. Remember that seeing, feeling is believing. I know AIDS is a killer and I fear for youth who are promiscuous in our society. I fear that finding ones sexual monogamous partner could become a game of Russian Roulette."

* * *

"I strongly believe that a model of mental/physical health and all that it implies (and its consciousness) ought to be mandated to society at large, starting with family, school inter agency workshops. If such a plan can be adopted and implemented, our awareness, information could be heightened to make good sound, informed decisions about ourselves, our lives and the society at large!"

* * *

"Your survey has caused me to take the closet look at my feelings and knowledge about AIDS to date. I am surprised by my ignorance and uncertainty about some of my attitudes. There are ethical questions which arise vis a vis dealing with HIV infected persons which require extensive thought and contemplation.

* * *

"It is amazing how many "so-called educators" out there feel that neither they nor any of their family members can contract AIDS. It is also interesting to hear them talk about how homosexuals are the only ones that have to worry about it and how condom machines should never be placed in the schools because it promotes sexual activity. These comments are just a few of those made by "educated" people. It is going to take something drastic in order to change those views."

"I worry that telling students they are safe with condoms is irresponsible. The pregnancy rate with condoms is not 100%. They should know the elements of risk involved."

* * *

"Although AIDS is a serious problem in society I do not believe it is the school's responsibility to provide a full curriculum. Create awareness, yes, and teach responsibility yes, in appropriate classes."

* * *

"AIDS is like teen pregnancy - they believe it won't happen to them even though they are sexually active."

* * *

"Students say that they are turned off by the bombardment of information on AIDS. When I go into a classroom they state that they do not want to hear anymore information on AIDS."

* * *

"I do feel its imperative to make people aware of high risk behaviors and charge them if possible to try to reduce overall incidence."

* * *

"Just a few comments - I realize from completing the questionnaire that I don't have all the factual information in my head and would have to check on the accuracy of some of the statements. Thus, AIDS education needs to be an ongoing process."

* * *

"Like most high profile and controversial issues people have become annoyed and exacerbated by it's consistent publicity. I realize the importance of making our young people aware of its' dangers, but we do have a tendency to over emphasize and overwhelm at times."

* * *

"AIDS is a disease and regardless how it is transmitted or regardless of how it originated, it is a life threatening menace that is very real and is or should be of monumental concern to all of us."

* * *

"Innocent persons can develop AIDS through no fault of their own (Blood Transfusion). Recently Red Cross has denied me from donating my blood because I live in CBN (I have previously made 37 donations) - PREJUDICE"

* * *

"Schools/Teachers should be held more accountable for the information/knowledge students get about HIV/AIDS. Right now, I don't think teachers are monitored closely enough. The information may or may not get passed along to students even though it is part of the curriculum."

* * *

"Condom machines were recently installed at the high school where I work <No feedback from parents yet, but I expect there are mixed reactions>. However, I feel the principal (at "my" other school) best summed up the importance of this in saying "it's not simply an issue of birth control anymore - it's much more than that." This is definitely a consideration for any birth control/relationship counselling that I do."

"The mere exercise of filling out this questionnaire indicates to me that my knowledge base in this area is not up to scratch."

* * *

"Relative to a time line, AIDS is a relatively new disease. Consequently, there are still many unknowns (are some people naturally immune to the disease) so difficult to be definite about facts and opinions. What's a #5 opinion today could become a #1 tomorrow if a new piece of information is reported."

* * *

"A friend died of AIDS about two years ago. Watching him, how his family supported him, how his partner supported him, made me see more clearly that the AIDS victim is still first and foremost a human being who needs our support, understanding, acceptance, caring, and empathy."

* * *

"I have a sense that students in this school feel the whole AIDS/HIV issue is irrelevant to them because it hasn't affected them personally. They talk about it in the same kind of terms they would use to describe some remote problem in the States such as a gang warfare or drive by shootings. Its as if the issue hasn't hit home to them yet. Conversations with our public health nurse, who does many AIDS/HIV awareness activities with our junior and senior high students, reveals the same observation, that students don't really feel it's relevant for them."

* * *

"Discrimination is the biggest issue regarding AIDS. We should be open about this issue recognizing that people who are sick are limited in their abilities and cannot be exposed to more stress than necessary. We should recognize that this form of discrimination is warranted but should not be used to hurt victims of AIDS. (There is good/fair discrimination and base discrimination!)"

* * *

"If I were teaching health or working as a counsellor at the junior or senior high school levels I would become more educated about AIDS and more involved in AIDS awareness."

* * *

"I would just like to add that for many of the questions in this last section, I answered "not sure" as I feel that sometimes you need to experience a certain situation or you need to be actually dealing with an issue before you determine your beliefs or feelings about it."

* * *

"There appears to be conflicting information regarding AIDS. An appropriate educational program would have to be updated regularly so accurate messages are passed along to the students."

* * *

"Students in the school system need to have sessions with students (their age) who are HIV positive! Most students feel this can not happen to them! It occurs in other communities etc.!"

* * *

"I am not sure that we have discovered the most 'effective' format for AIDS education. We seem to know 'the facts'. Why do we continue to 'risk date'?"

* * *

"Reiterate that AIDS education should be given every year starting at the end of Grade six before they begin the summer before junior high".

* * *

"Condoms should be accessible to students but I'm not sure school washrooms are appropriate."

* * *

"Innocent AIDS victims should not be punished, shunned and treated like aliens. Students from K-12 must be taught about not only the disease (prevention, etc.) but also that the AIDS victims have feelings and that the reality of their sad struggle is painful, often lonely and final."

* * *

"AIDS is a serious matter, but a life style change is the best preventive measure. Emphasize safer sex and other such programs is putting a bandaid on a cancerous sore. This may be o.k. for those who are sexually active, but why not talk abstinence to younger children - Grades 5-6? When we teach not to smoke for health reasons, its fine - why not do the same for sex outside marriage?"

* * *

"My biggest concern is the lack of information that some professional people still have about AIDS. There is a real need for open and honest education for students from the elementary to high school levels as well as professional development for teachers".

* * *

"There should be a curriculum geared specifically toward primary, elementary, junior high students. Most of the tapes (video) made are boring. Proper research should be done to determine how best to reach students through videos. Peer counsellors could be used to deliver some of these sessions."

* * *

"I think we are still seeing AIDS as someone else's disease. We need explicit information and active interaction to students particularly for Grade 5-9. Where many are sexually active. Parents and teachers don't want to hear that students in Gr. 7 or even Gr. 6 have had sexual experiences, but that is the reality and it's not much point in talking about condoms for example if they have no access and don't know how to use it anyway."

* * *

"These communities where I work have all the right ingredients for an AIDS epidemic. I feel it is only a matter of time and we will be another Conception Bay North. Birth Control is hard to come by here because there is no drug store and confidentiality at the health clinic is non-existent. I have been fighting for condom machines in our schools but have run into a bureaucratic brick wall."

* * *

"I feel that a formal AIDS prevention curriculum should be implemented as part of a Health program and should be age appropriate beginning with the early elementary grades."

* * *

"I am convinced from personal experience that education is the road to prevent as well as to human acceptance of people infected by the AIDS virus. Through this process I have seen people go from a basic attitude of 'AIDS kills FAGS' or 'Put them all on an island by themselves' to one of this person is sick and needs our empathy and help."

* * *

"I feel that catholic schools need to put more emphasis on sex education, especially STD's. They need to come to the realization that sex is a common part of teenage curiosity - one that needs to be discussed openly."

* * *

*More public education **especially** at the junior high/high school level is essential. The greater the awareness of HIV+ /AIDS, the greater the chances are of keeping it under better control (with less individuals contracting it).*

* * *



