# Nurses' Attitudes and Behaviors Towards AIDS Patients and Gay Men

by

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#### CHAPTER 1

# Introduction

Acquired immunodeficiency syndrome (AIDS) has become a health problem of epidemic proportions. Since 1981, nearly 50,000 cases of AIDS have been diagnosed in the United States (Centers for Disease Control, 1987). The Centers for Disease Control (1986) estimates over one million persons have been exposed to the human immunodeficiency virus (HIV) and by 1991 there are expected to be 250,000 cases of AIDS in the United States.

AIDS is a complex viral disease with no known medical cure. AIDS is caused by the human immunodeficiency virus which decreases cell immunity and leads to multiple opportunistic infections (Durham & Cohen, 1987). As currently understood, HIV can be transmitted by homosexual and heterosexual intercourse, transfusion of contaminated blood, blood products, needles, and syringes, and from an infected mother to an infant in utero, during birth, or by breastfeeding (Centers for Disease Control, 1987). Ninety-five percent of AIDS cases have occurred in the following people: (a) sexually active homosexual and bisexual men (73%), (b) heterosexual men or women who abuse intravenous drugs (17%), (c) hemophiliacs (1%), (d) heterosexual contacts with someone with AIDS (1%), (e) persons who have had transfusions with blood or blood products (2%), and (f) infants born to infected mothers (1%) (National Institute of Mental Health, 1987).

Compared to other diseases, AIDS elicits fear and prejudicial responses from the public (St. Lawrence, Husfeldt, Kelly, Hood, &

Smith, 1986). Much of the fear is based on misconceptions about the transmission of AIDS. Although much is known about the transmission of AIDS, people may consider themselves at risk.

Besides fear of contagion, stigma may contribute to prejudicial attitudes toward AIDS patients. People with AIDS may be stigmatized because they have AIDS and are gay. People who are homosexual may be the subject of prejudice related to sexual preference and the perceived association of AIDS to gay lifestyles.

As the prevalence of AIDS increases, people with AIDS will have more contact with health care professionals. Nurses in various practice settings will provide care for AIDS patients, patients affected with AIDS related complex disorders, and people whose behavior places them at risk for HIV exposure. Caring for AIDS patients can be emotionally threatening for nurses. Nurses may feel overwhelmed by the care required, and angry or frustrated because they are unable to alter the course of the disease. Nurses may experience similar fears and attitudes as the public. Perceptions based on fears, incomplete information, and prejudicial attitudes can impair a nurse's ability to respond to the needs of AIDS patients.

# Purpose of the Study

The purpose of this study is to examine nurses' beliefs about AIDS and homosexuality and their attitudes and behaviors towards caring for AIDS patients and gay men. Nurses' knowledge of AIDS and experience in caring for AIDS patients will also be explored.

#### Literature Review

Although AIDS as an illness has been known since only 1981, there has been an abundance of literature about various aspects of the disease. In spite of the volume, health care professionals and the general public act as if they lack knowledge about AIDS.

Health care professionals' knowledge about AIDS is often linked to beliefs and attitudes about AIDS and homosexuality. The literature in each of these areas overlaps. The following literature review is divided into three sections: (a) health care professionals' knowledge about AIDS, (b) health care professionals' attitudes about AIDS, and (c) health care professionals' attitudes about homosexuality.

Health Care Professionals' Knowledge About AIDS

There is limited research on health care professionals' knowledge about AIDS. Two studies compared knowledge about AIDS with experience in caring for AIDS patients (Reed, Wise, & Mann, 1984; Polan & Amchin, in press).

Reed, Wise, and Mann (1984) surveyed 264 nurses: 73 provided direct care, 27 handled specimens, and 164 nurses had no contact with AIDS patients. The nurses' source of AIDS information included newspapers (68%), professional journals (58%), television/radio (59%), and conferences (42%). Forty-eight percent of the nurses surveyed reported some understanding of AIDS, 30% quite a bit, and 12% reported only a little. Those nurses with experience had more knowledge about AIDS, but the difference was not significant. No information was provided on the amount of experience in caring for AIDS patients.

Polan and Amchin (in press) administered a questionnaire to 26 staff on a psychiatric unit. Seventeen respondents with prior experience in treating AIDS patients were compared with nine respondents who had no experience. Respondents with experience demonstrated more knowledge about AIDS. Although the difference between the two groups was not significant, the authors believed experience with AIDS patients increased staff knowledge. A limitation of the study was the small sample size.

Health care professionals' knowledge about AIDS was examined before and after educational programs on AIDS (Wertz, Sorenson, Liebling, Kessler, & Heeren, 1987; Hartnett, 1987). Wertz et al., (1987) surveyed 1,247 health care providers: 79% were nurses between 35 and 39 years of age and 29% had cared for a person with AIDS. Analysis of the respondents revealed significant (p <.05) improvements in accuracy of knowledge, modes of transmission, and means of infection control following the educational program.

In summary, the literature supports the need for AIDS education for health care professionals. Although experience with AIDS patients increases one's knowledge about AIDS, significant changes in knowledge occurs by participation in AIDS educational programs.

# Health Care Professionals' Attitudes About AIDS

Blumenfield, Smith, Milazzo, Seropian, and Wormser (1987) surveyed nurses' attitudes about AIDS. A series of four inservices on AIDS were presented to the nursing staff in four months. Following the inservices, a ten item true-false questionnaire was administered and

completed by nurses in the medical-surgical, intensive care, psychiatry, and the prison inpatient units. The survey was administered twice at six-month intervals. The response rate for the first survey was 107 of 317 (33%) and 191 of 340 (56%) for the second survey. Differences between each survey and each nursing unit were analyzed using the chi square statistic. The low response rate may have influenced the results and limits the sample's representativeness.

Two-thirds of the nurses had friends or family express concern about associating with hospital personnel who provided care for AIDS patients. Nurses on the psychiatry service reported the least amount of concern from family or friends on the first survey, but this concerned increased by 18% on the second survey. No explanation was provided for this increase.

In the Blumenfield et al. (1987) study, 50% of the nurses surveyed would request a transfer if they were required to care for AIDS patients on a regular basis. The highest percentage was from nurses working in the intensive care unit who cared for the sickest AIDS patients. Eighty-five percent of the nurses in both surveys believed a pregnant nurse should not care for an AIDS patient.

A limitation of the study was not administering the survey to the nurses before and after the inservices. This would have enabled the researchers to compare the nurses' attitude changes attributable to education. Also, the second survey included more respondents and it was not clear if these nurses received any inservice education, or if the amount of experience in caring for AIDS patients affected their

attitudes.

Kelly, St. Lawrence, Smith, Hood, and Cook (1987a) conducted a study to measure physicians' attitudes of patients with AIDS. Physicians were randomly selected to read one of four vignettes describing a heterosexual or homosexual male with either AIDS or leukemia. The vignettes content was identical except for the person's illness and sexual preference. After reading the vignette, each physician completed three scales (prejudicial evaluation scale, social interaction scale, and interpersonal evaluation inventory) to measure their attitudes toward the patient. Information on the validity and reliability of the scales was not provided.

The number of physicians who responded to each of the vignettes was evenly distributed. The respondents included 138 male and 19 female physicians, between the ages of 29 and 82, with an average of 20.4 years of practice.

Results were analyzed using multivariate analyses of variance. Physicians believed patients with AIDS were more responsible and deserving of their illness than leukemia patients. They believed AIDS patients experienced more pain and suffering, but were less deserving of sympathy and understanding and should be quarantined (Kelly et al., 1987a).

Physicians reported less willingness to interact with AIDS patients than leukemia patients. They were less willing to attend a party, work in the same office or renew a person's lease if they had AIDS versus leukemia (Kelly et al., 1987a).

Kelly, St. Lawrence, Smith, Hood, and Cook (1987b) replicated their original study with second and third year medical students. The students were randomly assigned to each of the four vignettes and the same three scales were used in the study.

Analyses of variance were done on each attitude item. Medical students viewed AIDS patients as much more responsible for their illness (F=136.18, p<.0001), deserving of what happened to them (F=9.29, p<.0005), experiencing pain (F=9.29, p<.005), dangerous to others (F=66.38, p<.0001), deserving to die (F=3.78, p<.05), deserving to lose their jobs (F=3.80, p<.05), and deserving to be quarantined (F=21.92, p<.0001) (Kelly et al., 1987b). The students were less willing to have casual interactions with AIDS patients than with leukemia patients, even though none of the interactions involved activities that carried the potential for HIV exposure.

A replication of this research was done with nurses (Kelly, St. Lawrence, Hood, Smith & Cook, 1988). One hundred sixty-six nurses were randomly selected to read one of the four vignettes. The nurses completed the three scales to assess their attitudes toward the patient and willingness to interact with him.

The results supported similar findings in the previous studies. AIDS patients were evaluated as significantly more responsible for being ill (p<.0001), deserving of what happened to him (p<.0001), dangerous to others (p<.0001), deserving to be quarantined (p<.001), and deserving to lose his job (p<.0001) (Kelly et al., 1988). Nurses were also less willing to engage in social interactions with AIDS

patients, even if there was no risk for HIV transmission.

Health care providers' attitudes about caring for AIDS patients were examined before and after an educational program on AIDS (Wertz, Sorenson, Liebling, Kessler, & Heeren, 1987). Wertz et al. (1987) surveyed 1,247 health care providers: 79% were nurses between 35 and 39 years of age and 29% had cared for a person with AIDS. Analysis of the health care providers' attitudes shifted at the p<.001 level on six of the nine attitude questions. Health care providers felt professionally competent to care for AIDS patients, felt comfortable interacting with the person's lover, would provide care for AIDS patients, and believed AIDS patients could have nonsexual contacts.

In summary, the research suggests that health care professionals have negative attitudes toward AIDS patients. Health care professionals are less willing to provide care for AIDS patients, experience fear of contagion, and believe AIDS patients are responsible for their illness.

# Health Care Professionals' Attitudes About Homosexuality

Research on health care professionals' attitudes about AIDS often addresses health care professionals' attitudes about homosexuality.

Research suggests that attitudes about AIDS are linked to attitudes about gays (Reed, Wise, & Mann, 1984; Douglas, Kalman, & Kalman, 1985; Kelly, St. Lawrence, Smith, Hood, & Cook, 1987a, 1987b, 1988).

Douglas, Kalman, and Kalman (1985) studied the degree of homophobia among health care professionals working in a hospital where male homosexuals with AIDS were treated. Respondents completed a

demographic questionnaire, questions pertaining to homosexuality and AIDS, and the Index of Homophobia (IHP) scale. The reliability of the IHP was reported as .90, with a standard error of measurement of 4.75 and good content and factorial validity (Douglas, Kalman, & Kalman, 1985).

Forty-one percent of the physicians and 35% of the nurses completed the questionnaire. All respondents stated they had provided care for male homosexuals with AIDS. There was no significant difference between the mean score for nurses and physicians on the IHP. Both groups scored in the low-grade homophobic range. The male respondents were significantly (p<.05) less homophobic than the females for both groups (nurses and physicians). Respondents with a homosexual friend or relative had significantly lower IHP scores (p<.05), than those who did not. Three percent of the physicians and 12 percent of the nurses believed homosexuals with AIDS were getting what they deserved (Douglas, Kalman, & Kalman, 1985).

Douglas, Kalman, and Kalman (1985) reported several limitations in this study. These included a low response rate with more non-homophobic than homophobic respondents, possible sampling bias, no control group, and the difficulty in determining if the responses reflected actual attitudes as opposed to the respondents trying to answer questions correctly.

Reed, Wise, and Mann (1984) surveyed nurses' experience with AIDS patients and attitudes about homosexuality. Respondents included 264 nurses with 73 providing direct care, 27 handling specimens, and 164

nurses who had no contact with AIDS patients. Eight of the 264 nurses refused to work with AIDS patients. Five of these eight nurses reported some understanding of AIDS. All eight nurses stated they had previously provided care for homosexual patients and three believed homosexuality was a psychiatric disorder, while five believed it was a lifestyle (Reed, Wise, & Mann, 1984). Nurses who believed homosexuality was a psychiatric disorder were more anxious about working with AIDS patients and afraid of catching AIDS, than nurses who considered homosexuality a lifestyle (Reed, Wise, & Mann, 1984).

Kelly, St. Lawrence, Smith, Hood, and Cook (1987a, 1987b, 1988) conducted three studies to measure health care professionals' attitudes about patients with AIDS. Respondents were randomly selected to read one of four vignettes describing a heterosexual or homosexual male with either AIDS or leukemia. After reading the vignette, the respondents completed three scales (prejudicial evaluation scale, social interaction scale, and interpersonal evaluation scale) to measure their attitude.

Regardless of whether the patient had AIDS or leukemia, homosexual patients were evaluated by physicians, medical students, and nurses as more responsible for their illness, less deserving of sympathy and understanding, and more deserving of what happened to them (Kelly et al., 1987a, 1987b, 1988). Homosexuals with AIDS were considered the most responsible and deserving of their illness than any other group.

Each group of health care professionals had similar responses in the area of social interaction with homosexual patients. Health care professionals were less willing to have social interactions with homosexual patients and the least willing when the patients were homosexuals with AIDS (Kelly et al., 1987a, 1987b, 1988).

# Summary of the Literature Review

There is limited research on nurses' knowledge about AIDS, attitudes about AIDS, and attitudes about homosexuality. Research supports that nurses have negative attitudes towards AIDS patients, particularly homosexuals with AIDS. Nurses may have AIDS knowledge, but knowledge alone may not change their negative attitudes towards AIDS patients and homosexuals with AIDS.

As the number of AIDS cases increases, nurses will have increasing contact with AIDS patients. Because nearly three-fourths of AIDS patients are gay or bisexual men, the patient group most in need of health care and counseling may be the least likely to receive it from a nurse who is knowledgeable and nonjudgmental concerning the patient's illness and lifestyle. Further research is needed to examine the relationship between a nurse's beliefs and attitudes about AIDS and homosexuality, and how these influence a nurse's intention and behavior towards caring for AIDS patients and homosexuals.

#### Conceptual Framework

The theory of reasoned action (Ajzen & Fishbein, 1980) offers one approach for explaining the relationship between a nurse's beliefs and attitudes about AIDS and homosexuality, and intention towards providing health care for AIDS patients and gay men. According to the theory, behavior is a function of one's intention to perform the behavior.

Behavioral intention is determined by the attitude towards the behavior and subjective norms (Figure 1).

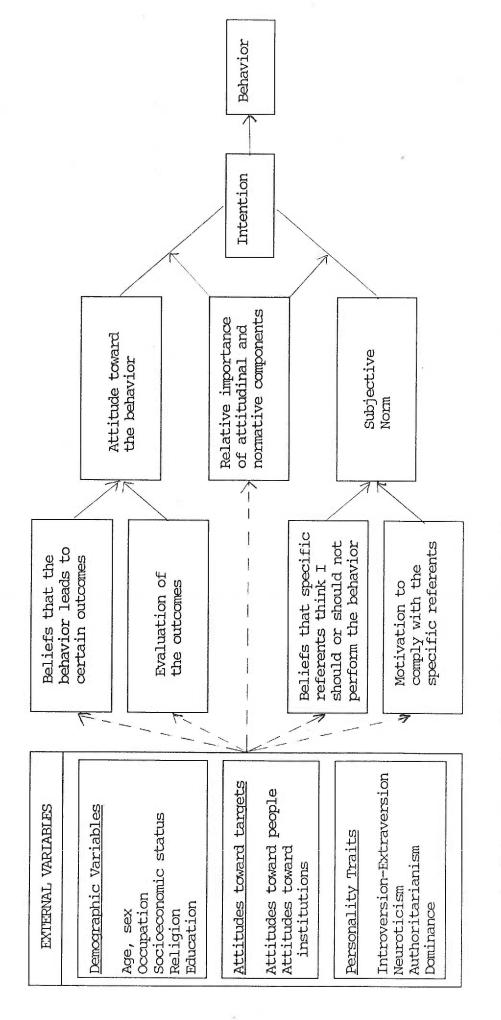
Ajzen and Fishbein (1980) define attitude as a person's favorable or unfavorable feelings for the concept. In the theory, attitudes are a function of behavioral beliefs. The behavioral beliefs influence the attitude toward the behavior. Attitude toward the behavior is the individual's beliefs that performing the behavior is good or bad, and that she is either for or against performing the behavior (Ajzen & Fishbein, 1980).

Subjective norms are also a function of beliefs. Subjective norms (normative beliefs) are the person's beliefs that certain individuals or groups think she should or should not perform the behavior and the motivation to comply with these norms and expectations (Ajzen & Fishbein, 1980). The subjective norm may exert pressure to perform or not perform a behavior, independent of a person's attitude toward the behavior. Individuals are more likely to perform certain behaviors if their actions achieve desired outcomes and are considered worthwhile by others.

The theory of reasoned action has been used as a conceptual framework for examining health promoting intentions of family planning (Fishbein, Jaccard, Davidson, Ajzen, & Loken, 1980; Jaccard & Davidson, 1972), weight loss (Saltzer, 1980; Sejwacy, Ajzen, & Fishbein, 1980), and health behaviors (Pender & Pender, 1986).

Jaccard and Davidson (1972) analyzed family planning behaviors and reported a correlation of .81 between attitude toward use of birth

FIGURE 1: Theory of Reasoned Action Model



-  $\rightarrow$  Possible explanations for observed relations between external variables and behavior

----> Stable theoretical relations linking beliefs to behavior

control pills and intention to use them. The correlation between subjective norms and intention to use birth control pills was lower (.68), but statistically significant (Jaccard & Davidson, 1972). This study provided beginning evidence of confirmation that attitudes and subjective norms contributed to intentions of behavior.

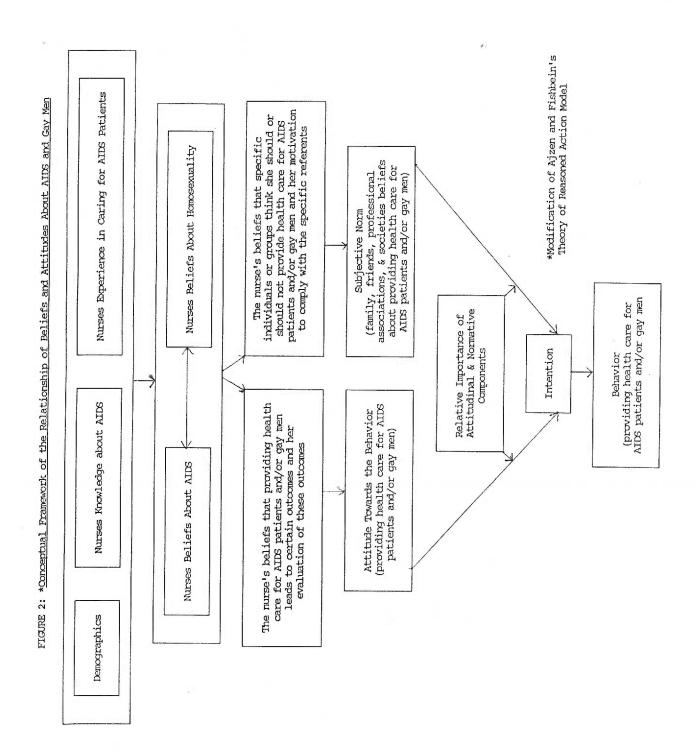
Saltzer (1978) used the theory of reasoned action for investigating the intentions to lose weight in a college age, obese population. Attitudes, subjective norms, values placed on health and physical appearance, and locus of control were measured. Attitude was the most important component for individuals with an internal locus of control, and subjective norm was the most influential component for persons with external locus of control. However, at a six week follow-up, extent of the weight change did not correlate significantly with intention to lose weight. In a later study of individuals actively involved in a weight reduction program, Saltzer (1980) found a relationship between strength of intentions to lose weight and actual weight loss.

Pender and Pender (1986) used this theory to examine the relationship among attitudes, subjective norms, and intentions to exercise regularly, maintain recommended weight, and avoid highly stressful life situations. The attitudinal and normative components of the model influenced intention to exercise regularly, but weight was not mediated by either component of the model. Pender and Pender (1986) suggest that biologic variables may influence intention, independent of attitudes and subjective norms. Also, subjective norms

did not influence intentions to avoid highly stressful life situations. Pender and Pender (1986) recommend future research exploring each health action as a separate behavioral category. This study implied intervening variables (biologic) may also influence intention and action in some cases, and therefore need to be emphasized more in the model.

Using Ajzen and Fishbein's theory of reasoned action (1980), the researcher proposes that nurses' beliefs about AIDS and homosexuality influence their behavioral and normative beliefs (Figure 2). These beliefs underlie their attitude toward caring for people with AIDS and/or gay men and subjective norms about homosexuality and AIDS. The attitudes and subjective norms influence intentions, which in turn influence nurses' behavior in caring for AIDS patients and homosexuals.

Sometimes the attitude toward the behavior and the subjective norm may not agree. A nurse may have a favorable attitude toward caring for AIDS patients and homosexuals, and believe important others (family, professional associations, society) think she should not provide care to these people. The nurse's intention will depend on the relative importance of the two components to her. The relative importance of the two components may vary from one behavior to another, and from one nurse to another. Since there is no procedure available to assess the weights of the two components for each individual and each behavior, each component will be given an estimated weight of relative importance for each nurse with respect to a set of behaviors (Ajzen & Fishbein, 1980).



The theory of reasoned action provides a framework for understanding the relationship among nurses' attitudes, subjective norms, and intentions toward caring for AIDS patients and homosexuals. The theory links beliefs to behavior by way of attitude toward the behavior, subjective norm, and intention.

# Definition of Terms

For the purpose of this study, the following variables: knowledge, beliefs, attitudes, and subjective norms, were defined. Knowledge referred to a nurse's factual information and understanding about AIDS and homosexuality. Beliefs were defined as a nurse's judgment about persons having certain characteristics, qualities, and attributes which lead to certain goals, values, or outcomes (Ajzen & Fishbein, 1980).

Attitude, as defined for this study, was a nurse's favorable or unfavorable feelings towards providing health care for AIDS patients and/or gay men. Attitude toward the behavior (providing health care for AIDS patients and/or gay men) was the nurse's belief that providing health care is good or bad and that the nurse is for or against providing health care for AIDS patients and/or gay men (Ajzen & Fishbein, 1980). Subjective norms were the nurse's beliefs that specific people or groups think she should or should not provide health care for AIDS patients and/or gay men (Ajzen & Fishbein, 1980).

#### Research Questions

The research question for this study was: What beliefs and attitudes about AIDS and homosexuality influence a nurse's intention and behavior towards caring for AIDS patients and gay men?

Other questions this study planned to answer were:

- 1. What are a nurse's beliefs about AIDS and homosexuality?
- 2. What are a nurse's attitudes about caring for people with AIDS and gay men?
- 3. What is the relationship between a nurse's experience in caring for AIDS patients and her beliefs about AIDS and homosexuality?
- 4. What is the relationship between a nurse's knowledge of AIDS and her beliefs about AIDS and homosexuality?
- 5. How important are others' beliefs about caring for AIDS patients and homosexuals to a nurse who cares for these patients?

#### CHAPTER 2

#### Methods

This chapter describes the study's design, sample, setting, data collection instruments, research procedures, and data analysis.

## Design

The aim of this descriptive correlational study was to describe the relationship among the variables of behavior, attitudes, and beliefs. In this study, the independent variables were: (a) nurses' knowledge about AIDS, (b) experience in providing health care for AIDS patients, (c) beliefs about AIDS, (d) beliefs about homosexuality, (e) attitudes towards providing health care for AIDS patients, (f) attitudes towards providing health care for gay men, (g) subjective norms towards providing health care for AIDS patients, and (h) subjective norms towards providing health care for gay men. The dependent variables were behavior towards providing health care for (a) AIDS patients, and (b) gay men.

## Sample and Setting

The subjects were registered nurses (N=35) employed at a major university hospital in the Northwest United States. The study used nonprobability convenience sampling of volunteers from two medical units at the hospital. Thirty-five nurses (56%) completed the questionnaire, 31 females and 4 males, between the ages of 22 and 61, with a mean age of 37.6 years. Most of the nurses were Caucasian (97%), and had a bachelor of science in nursing (66%), with an average of nine years of clinical experience.

#### Data Collection Instruments

The instruments used in this study measured eight independent variables: (a) knowledge abut AIDS, (b) experience in caring for AIDS patients, (c) beliefs about AIDS, (d) beliefs about homosexuality, (e) attitudes towards providing health care for AIDS patients, (f) attitudes towards providing health care for gay men, (g) subjective norms towards providing health care for AIDS patients, and (h) subjective norms towards providing health care for gay men. The dependent variables: (a) behavior towards providing health care for gay men were also measured.

#### Instruments

The researcher pretested a questionnaire developed specifically for this study to measure the independent and dependent variables (Appendix A). The questionnaire had six sections: (a) demographics, (b) knowledge about AIDS, (c) beliefs about AIDS, (d) beliefs about homosexuality, (e) attitudes towards providing health care for AIDS patients and gay men, (f) subjective norms towards providing health care for AIDS patients and gay men, and (g) behavior towards providing health care for AIDS patients and gay men.

The demographics section included questions about the subject's gender, ethnicity, age, education, and years of professional practice. Questions regarding knowledge and beliefs about AIDS were drawn from a questionnaire developed by Buczala and Garrard (1988). The Index of Homophobia Scale (IHP) (Appendix B), measured attitudes and beliefs

about homosexuality in general. The remaining questions were developed to cover the sections of attitudes, subjective norms, intentions, and behaviors towards providing health care for AIDS patients and gay men. The format for answering questions included a Likert scale and yes/no responses.

Since the validity and reliability of the questionnaire were untested, the researcher used a panel of experts to evaluate content validity. This panel of experts critiqued the questionnaire for accuracy and thoroughness of content, ease in completion, and clarity of items. Any questionable items were rewritten and reevaluated by the panel. The panel of experts included three nurses who had experience with research and developing questionnaires, a fourth nurse who had experience in providing health care for AIDS patients and gay men, and a statistician.

## Index of Homophobia Scale (IHP)

The IHP was included in the questionnaire because it measures attitudes and beliefs about homosexuality (Appendix B). The developers of the IHP defined homophobia as the personal affective responses of disgust, anxiety, aversion, discomfort, fear and anger with respect to either proximal or distal contact or involvement with homosexual individuals (Hudson & Ricketts, 1980). This definition most closely paralleled the variable of attitude toward homosexuality, therefore, was considered appropriate to measure the variable. The IHP was developed in 1977, and is a 25 summated scale with a score range from 0 to 100 (Hudson & Ricketts, 1980). Some of the items on the IHP

represent positive statements about gay people and their social interactions, and the remaining statements are negative. The IHP has a reliability of .90 (N=300) and correlates with the Sexual Attitude Scale with r=.53 (p<.0001) for construct validity (Hudson & Ricketts, 1980).

Factorial validity of the IHP was done using factor analysis. The item-total correlations were statistically significant at p<.05, with a median correlation of .541 (Hudson & Ricketts, 1980). The researchers reported a redundancy with the IHP items because each item was correlated with the sum of 24 items plus itself. Because of the redundant item-self correlation, items which were duplicated were omitted for this study (Appendix C).

#### Research Procedures

The following steps were taken in collecting the data:

- The Staff Development Coordinator, of Educational Services,
   University Hospital was contacted and agreed to assist in identifying
   the appropriate units to conduct the study.
- The department directors of two units were contacted and the proposed study, plus methods for conducting the research were explained.
- 3. The proposal was submitted to the Human Subjects Review Committee, the Office of Research Development and Utilization, School of Nursing, and Educational Services of the University Hospital.
- 4. The researcher met with the staff on each unit to briefly explain the study. The researcher sought volunteers while describing that participation was confidential, and refusal would not affect the individual's position on the unit. The researcher was available on each unit for any questions regarding the study, and provided the approximate dates for data collection (Appendix E).
- 5. Since respondents were not identified by name on the questionnaire, or when reporting the results, their responses were confidential. Furthermore, the researcher provided anonymity by assigning a number code to each questionnaire. The researcher administered the questionnaire during a block of time most convenient for the staff on each shift. Staff were asked to answer the questions independently. The approximate time to complete the questionnaire was 15 to 20 minutes. After completing the questionnaire, each respondent

placed the questionnaire in a sealed envelope and returned it to the questionnaire box located on each unit. Return of the questionnaire was evidence of informed consent.

6. Data collection was completed on each unit within a two week period.

# Data Analysis

Descriptive statistics were used to describe the sample characteristics and mean scores on the scales. All the variables were correlated using Pearson correlation coefficients. Pearson's correlations were also computed to test the relationships stated in the six research questions. Then, partial correlations were used to determine the influence of the variables in predicting behavior towards providing health care for AIDS patients and gay men. The significance level was set at an alpha level of 0.05.

#### CHAPTER 3

#### Results

This chapter represents the results of the study. First, the sample will be described and a statistical analysis of the data for each research question will be presented. Then, this chapter will present correlations based on the conceptual framework.

## Analysis of Data

Data were analyzed using the CRUNCH statistical package and guided by the research questions. The analysis involved descriptive statistics regarding the demographics, and correlative statistics regarding sources of knowledge, beliefs about AIDS and homosexuality, and attitudes and behaviors towards providing health care for AIDS patients and gay men.

## Description of the Sample

There were 63 questionnaires distributed to 63 nurses on two units. Thirty-five registered nurses (56%) completed the questionnaire, 31 females and 4 males, between the ages of 22 and 61, with a mean age of 37.6 years. Most were Caucasian (97%), had a bachelor of science in nursing (66%), with an average of nine years of clinical experience (Table 1).

Ninety-seven percent of the nurses had provided health care for AIDS patients and gay men. During the last year, 33 of the 35 nurses surveyed provided health care for AIDS patients, while 32 out of 35 provided health care for gay men.

Table 1

<u>Demographic Distribution of Nurses</u> (N=35)

CHARACTERISTIC	FREQUENCY	PERCENTAGE
Sex		
Female	31	89%
Male	4	11%
Ethnicity		
Caucasian	34	97%
Black	0	0%
Hispanic	0	0%
Asian	1	3%
Native American	0	0%
Education		
Associate Degree in Nursing	6	17%
Diploma in Nursing	3	8.5%
Bachelor of Science in Nursing	23	66%
Master's degree in Nursing	3	8.5%
Doctoral degree	0	0%
Age		
$\bar{\mathbf{x}}$	37.6	
Range	22-61	
Years in Nursing		
x	9.0 years	S
Range	<1-39 years	S

Forty-three percent of the sample reported personally knowing someone with a positive HIV antibody test and 69% knew someone at risk for AIDS. Thirty-one percent of the respondents personally knew someone with AIDS and 23% knew someone with ARC.

# Description of the Results

Knowledge. Questions 14-23 measured knowledge about the risk of HIV infection associated with specific behaviors. Respondents rated these questions on a six point Likert scale ranging from one (no risk) to six (very high risk). There was a high degree of knowledge regarding high risk behaviors, but less knowledge of low risk behaviors (Table 2). Respondents answers ranged from moderate risk to no risk on actions such as sharing eating utensils, living in the same household as a person with AIDS, intimate and social kissing. These results were similar to those from a study by Buczala & Garrard (1988) (Table 3).

Questions 24-31 were yes/no statements regarding general knowledge about AIDS and safe sex practices. Ninety-seven percent of the sample answered each of these items correctly with the exception of the item concerning lesbian women's risk for AIDS. Over one-third of the sample were unclear regarding the risk of AIDS among lesbian women.

A total knowledge score with a possible range of 0-18 was computed for each respondent. A score of 18 indicated all items were answered correctly. The obtained scores ranged from 10-18, with a mean score of 14, and a standard deviation of 1.9. The median score was 13. Thus, the average respondent answered 72% of the questions correctly. This

Table 2

Rating of Transmission Risk for HIV Infection Associated With Selected

Behaviors (N=35)

	Very High Risk	High Risk	Mod. Risk	Low Risk	Very Low Risk	No Risk C	% Correct
Using public restrooms				9%	37%	<u>54%</u>	54%
Sharing eating utensils							
with a PWA	3%	6%	9%	17%	40%	<u>26%</u>	26%
Living with a PWA	***		6%	14%	46%	34%	34%
Transmission during							
pregnancy	<u>91%</u>	<u>6%</u>	3%				97%
Receiving a blood							
transfusion <u>today</u>		11%	29%	20%	34%	6%	34%
Sharing drug injection							
equipment	<u>94%</u>	<u>6%</u>					100%
Social kissing			9%	14%	46%	<u>31%</u>	31%
Intimate kissing	11%	14%	29%	17%	23%	6%	23%
Unprotected sex with							
a bisexual man	80%	<u>17%</u>	<u>3%</u>				100%
Unprotected sex with	17%	<u>83%</u>					100%
IVDU							

Note. PWA = Person with AIDS; IVDU = Intravenous Drug User

Correct answers are underlined.

Table 3

<u>Comparison of Correct Responses About AIDS Knowledge For Nurses</u>

(Bachman, 1988) and College Women (Buczala & Garrard 1988)

		Nurses (N=35)	College Women (N=128)
***	Using public restrooms	54%	48%
***	Sharing eating utensils with a PWA	26%	23%
**	Living with a PWA	34%	27%
*	Transmission during pregnancy	97%	99%
**	Receiving a blood transfusion today	34%	28%
*	Sharing drug injection equipment	100%	100%
**	Social kissing	31%	57%
**	Intimate kissing	23%	27%
*	Unprotected sex with a bisexual man	100%	99%
*	Unprotected sex with a IVDU	100%	99%

Note. PWA = Person with AIDS

IVDU = Intravenous Drug User

\* = Very High and High Risk

\*\* = Very Low Risk

\*\*\* = No Risk

score was the same as the non-nurse sample (Buczala & Garrard, 1988).

Items 32-40 referred to sources of information for acquiring knowledge about AIDS. Participants identified their sources from a list that included media, publications, health care professionals, friends/relatives, and AIDS inservices at their place of employment (Table 4). Participants also identified which source was the most helpful. The most frequently reported sources were health care professionals (100%), newspapers/magazines (97%), pamphlets/posters (97%), AIDS inservices at their place of employment (97%), professional journals (94%), and TV/radio (94%). Overall, AIDS inservices were found to be the most helpful source. In the Buczala and Garrard (1988) study, TV/radio was the most helpful source.

Five respondents cited other sources of information. These included a local AIDS project, AIDS patients, gay organizations, and research from other countries about needle exchange programs.

Beliefs About AIDS. Items 41-50 measured the respondents beliefs about AIDS. Respondents rated these items on a four point Likert scale of strongly agree (4), to strongly disagree (1). Potential scores ranged from 10-40, with 40 indicating the most favorable beliefs about personal rights of AIDS patients. Actual scores ranged from 26-30, with a mean of 32, and a median score of 32. The most frequently obtained scores were 28 and 35.

Beliefs About Homosexuality. Items 51-60 addressed nurses' beliefs about homosexuality, and were drawn from the Index of Homophobia Scale. Respondents rated their beliefs on a four point

Table 4

Sources of Information About AIDS and Most Helpful Source (N=35)

		Source of Information		Helpful urce
TV/Radio	94%	(33)	3%	(1)
Newspapers/Magazines	97%	(34)	3%	(1)
Pamphlets/Posters on AIDS	97%	(34)	0%	(0)
AIDS Education/Inservices	97%	(34)	57%	(20)
Health Care Professionals	100%	(35)	20%	(7)
Friends/Relatives	54%	(19)	0%	(0)
Professional Journals	94%	(33)	17%	(6)
Other	3%	(1)	0%	(0)

Likert scale ranging from one (strongly agree), to four (strongly disagree). Potential scores ranged from 10 to 40, with scores between 10 and 17 regarded as high grade non-homophobic; 18-25 as low grade non-homophobic; 26-33 as low grade homophobic; and 34-40 as high grade homophobic (Hudson & Ricketts, 1980). Three percent of the respondents scored in the high grade non-homophobic range; 37% as low grade non-homophobic; 60% as low grade homophobic; and 0% as high grade homophobic. Nurses' responses to their beliefs about homosexuality are presented in Appendix E.

Attitudes Toward Providing Health Care For AIDS Patients and Gay
Men. Items 61-66 measured attitudes towards providing health care for
people with AIDS and gay men. Respondents rated these items on a four
point Likert scale with four, as strongly agree, and one, as strongly
disagree. Potential scores ranged from 6-24, with the lower score
representing favorable attitudes in providing health care. Actual
scores ranged from 6-18, with a mean of 12.8 and a median score of 13.
Forty-three percent had a score of 12 or less indicating favorable
attitudes towards providing health care for AIDS patients and gay men.

Subjective Norm and Intention. Questions 67-80 measured the respondents beliefs that certain individuals think they should or should not provide health care for AIDS patients and/or gay men and the motivation to comply with these norms and expectations. Respondents answered these items on a four point Likert scale of strongly agree (4), to strongly disagree (1). Respondents believed close friends would support their providing health care for AIDS patients (77%) and

gay men (92%). All respondents believed their co-workers would support their providing health care, and over 60% stated their family would support their decision to provide health care to these individuals. Regardless of whether the nurses' close friends, family, or co-workers supported them in providing health care to AIDS patients and gay men, 97% of the nurses intended to provide health care to these individuals.

Behavior Towards Providing Health Care For AIDS Patients and Gay Men. Items 81-92 measured a nurse's behavior in providing health care. Respondents rated their behaviors on a five point Likert scale of never (1), rarely (2), sometimes (3), often (4), and always (5). Respondents were asked four identical questions regarding their behavior towards AIDS patients and gay men. Three questions involved wearing a gown or gloves when having physical contact with a patient, contact with a patient's bed linen and clothes, and when emptying bedpans or urinals. The fourth question asked if nurses avoided unnecessary entry into the patient's room. At least 80% of the sample reported wearing gloves when emptying urinals or bedpans regardless of whether it was for an AIDS patient or a gay man. Thirty-seven percent rarely wore a gown when having physical contact with an AIDS patient, and 46% rarely wore a gown when having physical contact with gay men patients. Only 3% would always avoid entering a patient's room if they had AIDS or were gay.

Additional Comments. At the end of the questionnaire, space was provided for nurses to write additional comments. Fifteen nurses responded with comments of personal experiences in caring for AIDS

patients, interest in knowing the results of the study, and suggestions for additional questionnaire items. These suggestions addressed nursing interventions when caring for patients with infected draining wounds and caring for people in the later stages of AIDS.

One female respondent stated her feelings for AIDS patients varied according to their attitude and respect for health care professionals. For instance, a few angry patients who had no concern for protecting themselves or others, stated they would like to share the disease. This respondent believed these views did not lend themselves to nurses wanting to provide health care for AIDS patients.

Relationships Between Variables. Data analysis included examining possible relationships between selected variables. Correlations were obtained between these selected variables: (a) beliefs about AIDS and homosexuality, (b) attitudes towards providing health care for AIDS patients and gay men, (c) knowledge and beliefs about AIDS and homosexuality, (d) other's beliefs about caring for AIDS patients and gay men and a nurse's intention to care for these people, and (e) beliefs and attitudes about AIDS and homosexuality with intention and behavior towards caring for AIDS patients and gay men. No statistically significant correlations were found between these selected variables.

Correlations based on the conceptual framework, however, presented some interesting results. Specific variables were significant or reached significance. First, a positive correlation existed between knowledge and intention (r=.33, p=.05), indicating a possible direct

relationship of knowledge with intention to provide health care for AIDS patients and gay men. Second, beliefs about homosexuality and subjective norm (r=.32, p=.06) approached the .05 alpha level, alluding to a possible relationship of the nurse's beliefs about homosexuality to the subjective norm. Finally, subjective norm and subjective intention (r=.97, p=.000), and subjective intention and intention (r=.48, p=.003) were statistically significant, but not surprising, given the variables theoretic relatedness.

Pearson correlation coefficients were computed for knowledge, attitudes, and behavior. First, correlations were analyzed for knowledge and attitudes towards providing health care for AIDS patients and gay men. Knowledge and attitudes towards gay men and attitudes towards AIDS patients/gay men approached the level of significance (Table 5). These findings indicate a possible relationship between knowledge and attitudes. In Ajzen and Fishbein's reasoned action model, knowledge is an external variable and the authors suggest a possible observed relationship between the external variables and behavior. These findings would support the model.

Next, Pearson correlation coefficients for knowledge and behavior towards AIDS patients and gay men were calculated. Statistically significant results existed between knowledge and behavior towards AIDS patients (r=-0.41, p=.01); knowledge and behavior towards AIDS patients/gay men (r=-0.42, p=.01); and knowledge and behavior towards gay men (r=-0.37, p=.03). Each of these correlations were inverse relationships because a majority of the questions were stated in

Table 5

Pearson Correlation Coefficients for Nurses Knowledge and Attitudes

Towards AIDS Patients and Gay Men (N=35)

	KNOWLEDGE	ATTPHCGM	ATHCWAGM
KNOWLEDGE	1.00	-0.47	-0.45
	p=.000	p=.004	p=.01
ATTPHOGM		1.00	.95
		p=.000	p=.000
ATHCWAGM			1.00
			p=.000

Note: KNOWLEDGE = Nurses' Knowledge About AIDS

ATTPHCGM = Attitudes Towards Providing Health Care For Gay Men

ATHCWAGM = Attitudes Towards Providing Health Care for AIDS

Patients/Gay Men

negative terms. In this case, an inverse relationship was a positive relationship. More knowledge lead to less negative behavior towards AIDS patients and gay men.

Again, knowledge was an external variable in the Ajzen and Fishbein model. The findings suggest a possible relationship between the external variable (knowledge) and behavior towards AIDS patients and gay men which is consistent with the model.

Pearson's correlations were calculated for beliefs, attitudes towards AIDS patients and gay men, and intention. There were several significant findings. These included possible relationships between beliefs about AIDS and attitudes towards AIDS patients and gay men; and beliefs about AIDS with intention to provide health care for AIDS patients and gay men (Table 6). Each correlation had an inverse relationship because a majority of the questions were stated in negative terms.

Correlations were obtained for attitudes towards providing health care for gay men, subjective norm, intention, and beliefs about AIDS (Table 7). Two statistically significant correlations were found: attitudes towards providing health care for gay men and intention (r=-0.56, p=.001); and attitudes towards providing health care for gay men and beliefs about AIDS (r=-0.54, p=.001). Both of these findings were inverse relationships because a majority of the questions were stated in negative terms. Therefore, the less negative a nurse's attitudes towards providing health care for gay men, the greater the intention to provide health care. Also, positive beliefs about AIDS

Table 6

Pearson Correlation Coefficients for Nurses' Beliefs About AIDS,

Attitude, and Intention Towards Providing Health Care for AIDS

Patients/Gay Men (N=35)

	BELAIDS	ATTPHCGM	ATHCWAGM	INTENT
BELAIDS	1.00	-0.54	-0.54	.54
	p=.000	p=.001	p=.001	p=.001
ATTPHCGM		1.00	•95	-0.56
		p=.000	p=.000	p=.001
ATHCWAGM			1.00	-0.55
			p=.000	p=.001
INTENT				1.00
				p=.000

Note: BELAIDS = Beliefs About AIDS

ATTPHCCM = Attitudes Towards Providing Health Care For Gay Men

ATHCWAGM = Attitudes Towards Providing Health Care For AIDS

Patients/Gay Men

INTENT = Intention Towards Providing Health Care For AIDS

Patients/Gay Men

Table 7

<u>Pearson Correlation Coefficients For Nurses' Attitudes Towards Gay Men,</u>

<u>Subjective Norm, Intention, and Beliefs About AIDS</u> (N=35)

	ATTPHOGM	SBINTENT	INTENT	BELAIDS
ATTPHCGM	1.00	-0.34	-0.56	-0.54
	p=.000	p=.04	p=.001	p=.001
SBINTENT		1.00	.48	.26
		p=.000	p=.003	p=.13
INTENT			1.00	.54
			p=.000	p=.001
BELAIDS				1.00
				p=.000

Note: ATTPHCCM = Attitudes Towards Providing Health Care For Gay Men

SBINTENT = Subjective Norm and Intention To Provide Health Care

For AIDS Patients/Gay Men

INTENT = Intention Towards Providing Health Care For AIDS

Patients/Gay Men

BELAIDS = Beliefs About AIDS

suggested positive attitudes towards providing health care for gay men.

Pearson correlation coefficients were computed for attitudes towards providing health care for AIDS patients/gay men, intention, and behavior towards providing health care for AIDS patients/gay men (Table 8). Some of these variables approached the level of significance, indicating a possible relationship between attitudes and behavior towards providing health care for AIDS patients and gay men.

Behavior towards AIDS patients and gay men was correlated with knowledge and intention to provide care to these individuals (Table 9). Knowledge and intention were statistically significant (r=.33, p=.05). According to the reasoned action model, this suggests a possible relationship between the external variable (knowledge) and intention. The correlation for knowledge and behavior towards AIDS patients was significant (r=-0.41, p=.01); and knowledge and behavior towards gay men was also significant (r=-0.37, p=.03). When intention was correlated with behavior towards AIDS patients or gay men, the results were not significant (Table 9).

The researcher computed partial correlations to estimate the composite influence of the independent variables in predicting behavior towards AIDS patients and gay men. Initially, attitudes towards AIDS patients (independent variable) was correlated with behavior towards AIDS patients (dependent variable). Beliefs about AIDS was the constant variable. There was no significant correlation  $(r_1=-0.24)$ . Then, attitudes towards gay men (independent variable) was correlated with behavior towards gay men (dependent variable). Again, beliefs

Table 8

Pearson Correlation Coefficients For Nurses' Attitudes, Intention, and

Behavior Towards AIDS Patients/Gay Men (N=35)

	ATTCWAGM	INTENT	BDBBEHGM	BEHWAGM
ATTCWAGM	1.00	-0.55	.51	.49
	p=.000	p=.001	p=.002	p=.003
INTENT		1.000	-0.33	-0.26
		p=.000	p=.05	p=.14
BDBBEHGM			1.00	.92
			p=.000	p=.000
BEHWAGM				1.00
				p=.000

Note: ATHCWAGM = Attitudes Towards Providing Health Care For AIDS

Patients/Gay Men

INTENT = Intention Towards Providing Health Care For AIDS

Patients/Gay Men

BDBBEHGM = Blood And Body Precautions When Caring For Gay Men

BEHWAGM = Behavior Towards AIDS Patients/Gay Men

Table 9

<u>Pearson Correlation Coefficients For Nurses' Behavior Towards AIDS</u>

<u>Patients/Gay Men, Knowledge, and Intention (N=35)</u>

	KNOWLEDGE	INTENT	BEHPWA	BEHGM
KNOWLEDGE	1.00	.33	-0.41	-0.37
	p=.000	p=.05	p=.01	p=.03
INTENT		1.000	-0.20	-0.28
		p=.000	p=.24	p=.10
BEHPWA			1.00	.76
			p=.000	p=.000
BEHGM				1.00
				p=.000

Note: KNOWLEDGE = Nurses' Knowledge About AIDS

INTENT = Intention Towards Providing Health Care For AIDS

Patients/Gay Men

BEHPWA = Behavior Towards People With AIDS

BEHGM = Behavior Towards Gay Men

about AIDS was the constant variable. No significant correlation occurred  $(r_1=0.54)$ . Finally, attitudes towards AIDS patients and gay men (independent variable) was correlated with behavior towards AIDS patients and gay men (dependent variable). Beliefs about AIDS was the constant variable. There was no significant correlation  $(r_1=0.53)$ .

No statistically significant results were found for the relationship between variables in the research questions. However, there were some significant correlations between knowledge, attitudes, intention, and behaviors towards AIDS patients and gay men, but the level of significance may be questionable given the small sample.

### CHAPTER 4

## Discussion

This chapter will relate the findings of the study to the research questions concerning nurses attitudes and behaviors towards AIDS patients and gay men. The relationships between selected variables will be explored. Also, the findings will be evaluated within the context of the preceding literature review and the theory of reasoned action (Ajzen & Fishbein, 1980).

# Sample Characteristics

The majority of the sample of nurses (N=35) were female,

Caucasian, in their late 30's, with a bachelor's degree in nursing, and
an average of nine years of professional practice. Ninety-seven

percent of the nurses had provided health care for AIDS patients and
gay men. Nearly half of the sample reported personally knowing someone
with a positive HIV antibody test, a third knew someone with AIDS, and
about one fourth knew someone with ARC.

This sample had cohort similarity to the sample in the study by Buczala and Garrard (1988). Both samples were similar in age, ethnicity, and sex, but had different levels of education. Even though the nurses had more education than the college women, they did not have more knowledge about AIDS.

This sample differs from samples used for similar research regarding nurses' knowledge, attitudes, and behaviors towards people with AIDS and homosexuals. Samples from other studies included nurses with less knowledge and experience in providing health care for people

with AIDS (Reed, Wise, & Mann, 1984; Wertz, Sorenson, Liebling, Kessler, & Heeren, 1987). This difference may be due to the rapid increase in AIDS information available to nurses. Also, 97% of the nurses in this study intended to continue to provide health care for these individuals, while 50% of the nurses in the Blumenfield et al. (1987) study would request a transfer if they were required to care for AIDS patients on a regular basis.

In previous studies, health care professionals believed gay men with AIDS were significantly more responsible for their illness and less deserving of sympathy and understanding (Kelly, St. Lawrence, Smith, Hood, & Cook, 1987a; Kelly, St. Lawrence, Smith, Hood, & Cook, 1987b; Kelly, St. Lawrence, Smith, Hood, & Cook, 1988). In the present study, 62% believed gay men were not responsible for their illness, and 20% were less accepting of gay lifestyles because of AIDS.

Surprisingly, 91% of the nurse were not sympathetic to the problems caused by AIDS in the gay community. This finding is a confusing result and may reflect a difference in a nurse's personal and professional beliefs and attitudes.

# Research Questions

1. What are a nurse's beliefs about AIDS and homosexuality?

Overall, nurses' beliefs about AIDS were favorable. Nurses supported rights of people with AIDS (i.e. to attend public school, maintain a job, live in an apartment, etc.), but 86% believed people with AIDS should receive treatment only in clinics and hospitals designated for AIDS patients. Also, 74% believed AIDS was easier to acquire than

scientists convey. These results support previous studies of nurses fear of contagion which conflicts with their knowledge (Blumenfield, Smith, Milazzo, Seropian, & Wormser, 1987; St. Lawrence, Husfeldt, Kelly, Hood, & Smith, 1986).

Nurses' beliefs about homosexuality depended on the type of relationship with a homosexual person. In general, it is important to note that the majority (60%) rated as low grade homophobic on the IHP. Social relationships were the least homophobic for the respondents. Ninety-one percent of the nurses felt comfortable working with male homosexuals and 94% felt at ease talking with homosexuals at a party. Seventy-seven percent of the nurses stated they would feel nervous being in a group of homosexuals. This response suggests concerns about being identified as homosexual when associated with homosexuals rather than reflecting just a social relationship.

Relationships which could involve physical contact increased these respondents anxiety and personal comfort. Respondents stated they would feel uncomfortable if a member of their sex made an advance towards them (51%), if they found themselves attracted to a member of their sex (77%), and if they knew their neighbor was a homosexual (71%). Nearly half of this sample (49%) would feel comfortable if their sibling or best friend were a homosexual. This suggests that family or friendship relationships were more comfortable than intimate sexual relationships.

Pearson's correlations were computed to examine the relationship between a nurse's beliefs about AIDS and homosexuality. These two variables were not statistically significant (r=-0.14, p=.42), indicating that nurses beliefs about AIDS was not associated with their beliefs about homosexuality.

2. What are a nurse's attitudes about caring for people with AIDS and gay men? Providing health care to AIDS patients was personally rewarding to 40% of the nurses. In general, 60% of the nurses did not believe gay men were responsible for their illness, nor were they less accepting of gay lifestyles because of AIDS (80%). Also, 80% of the nurses were not fearful about providing health care or handling blood products of AIDS patients (74%). These findings suggest that these nurses have favorable attitudes towards providing health care for AIDS patients and gay men.

When Pearson's correlations were computed for attitudes towards AIDS patients and gay men, there were no statistically significant relationships (r=-0.15, p=.40). Again, the lack of association indicated nurses' attitudes towards caring for AIDS patients were separate from their attitudes about gay men. This finding was contrary to previous studies which suggested a relationship between attitudes towards AIDS patients and attitudes towards gay men.

3. What is the relationship between a nurse's experiences in caring for AIDS patients and her beliefs about AIDS and homosexuality? A t-test was conducted between experience in caring for AIDS patients and beliefs about AIDS; and experience in caring for AIDS patients and beliefs about homosexuality (Table 10). The mean score for beliefs about AIDS for nurses' with experience (3.17) was higher than the mean

Table 10

T-test Comparison of Nurses' Experience With Beliefs About AIDS and Beliefs About Homosexuality (N=35)

Dependent Variable		Group 1	Group 2		Separate Variances	Pooled Variances
BELATOS						
	N	34	1	t	-3.92	-0.66
	Mean	3.174	3.400	DF	33.00	33
	S.D.	0.337	0.000	P	0.000	0.512
IHP						
	N	34	1	t	-6.13	-1.04
	Mean	2.550	2.800	DF	33.00	33
	S.D.	0.238	0.000	P	0.000	0.308

Note. Group 1 = Experience with AIDS patients.

Group 2 = No Experience with AIDS patients.

BELAIDS = Beliefs About AIDS.

IHP = Beliefs About Homosexuality.

score for beliefs about homosexuality for nurses' with experience in caring for AIDS patients (2.55). No significant results were obtained because 97% (N=34) had experience in providing health care for AIDS patients.

4. What is the relationship between a nurse's knowledge of AIDS and her beliefs about AIDS and homosexuality? There was no statistically significant relationship between knowledge and beliefs about AIDS, or knowledge and beliefs about homosexuality. These findings support the Ajzen and Fishbein model (1980). In the model, there is only a possible relationship between external variables (knowledge) and beliefs.

Correlations for knowledge and attitudes towards AIDS patients or gay men were not significant, which supports the reasoned action model (Table 11). These findings suggest that gaining knowledge and information about AIDS or homosexuality may not alter an individual's beliefs about AIDS or homosexuality.

In a similar study of college women, Garrard & Buczala (1988) found that respondents had knowledge of high risk behaviors for HIV transmission and a good knowledge about AIDS, but could not discriminate low risk behavior (casual contact transmission).

Correlations between knowledge and behavior towards AIDS patients and gay men were significant (r=-0.42, p=.01). An inverse relationship existed because the majority of the behavior questions were stated in negative terms. The findings suggest that increased knowledge lead to positive behavior. Also, there was a significant correlation between

Table 11

Pearson Correlation Coefficients For Nurses' Knowledge and Attitudes

Towards Providing Health Care For AIDS Patients/Gay Men (N=35)

	KNOWLEDGE	ATTHCPWA	ATTPHCGM	ATHCWAGM
KNOWLEDGE	1.00	.05	-0.47	-0.45
	p=.000	p=.75	p=.004	p=.01
ATTHCPWA		1.00	-0.15	.17
		p=.000	p=.39	p=.32
ATTPHOGM			1.00	.95
			p=.000	p=.000
ATHCWAGM				1.00
				p=.000

Note: KNOWLEDGE = Nurses' Knowledge About AIDS

ATTHCPWA = Attitudes Towards Providing Health Care For AIDS

Patients

ATTPHOGM = Attitudes Towards Providing Health Care For Gay Men

ATHCWAGM = Attitudes Towards Providing Health Care For AIDS

Patients/Gay Men

knowledge and attitudes toward providing health care for gay men and AIDS patients. This inverse correlation (r=-0.45, p=.001) indicated that with greater knowledge, nurses had less negative attitudes.

5. How important are others' beliefs about caring for AIDS patients and homosexuals to a nurse who cares for these patients?

There was no significant relationship between subjective norm and intention to provide health care for AIDS patients and gay men.

Correlations for subjective norm and attitudes towards AIDS patients or gay men were also not significant (Table 12). These results suggest that subjective norm does not influence a nurse's intention or attitude towards providing health care for AIDS patients or gay men. These findings were contrary to the reasoned action model which implies a stable theoretical relationship between attitudes, subjective norm, and intention. This could be due to the respondents lack of understanding of questionnaire items or a social desirability response.

When intention was correlated with having contact with a gay patient's blood or body fluids, the relationship was significant (r=-0.33, p=.05). Knowledge and contact with a gay patient's blood or body fluids also reached significance (r=-0.34, p=.02). These findings suggest that nurses view the gay population as high risk and wear gloves when having contact with their blood or body fluids. In general, these results also support the model's assumption that intention is correlated with behavior.

Generally, respondents wore gloves when having contact with any patient's blood or body substances. This is likely related to

Table 12

<u>Pearson Correlation Coefficients For Attitudes Towards Providing Health</u>

<u>Care For AIDS Patients/Gay Men and Subjective Norm Among Nurses (N=35)</u>

	SUBJNORM	ATTHCPWA	ATTPHOGM	ATHCWAGM
		<u> </u>		
SUBJNORM	1.00	-0.11	-0.23	-0.25
	p=.000	p=.54	p=.19	p=.15
ATTHCPWA		1.00	-0.15	0.17
		p=.000	p=.39	p=.32
ATTPHOGM			1.00	0.95
			p=.000	p=.000
ATHCWAGM				1.00
				p=.000

Note: SUBJNORM = Subjective Norm Of A Nurse's Perception Of Others'

Beliefs About Caring For AIDS Patients/Gay Men

ATTHCPWA = Attitudes Towards Providing Health Care For AIDS

Patients

ATTPHCGM = Attitudes Towards Providing Health Care For Gay Men

ATHCWAGM = Attitudes Towards Providing Health Care For AIDS

Patients/Gay Men

institutional implementation of the Centers for Disease Control universal precautions for blood and body fluids with all patients.

Partial correlations were computed to determine the influence of the independent variable (attitudes towards AIDS patients and gay men) on the dependent variable (behavior towards AIDS patients and gay men). Beliefs about AIDS was the constant.

Theoretically, the model assumes that beliefs influence attitudes. Therefore, in computing the partial correlations, beliefs about AIDS was first added as a constant variable. Then attitudes towards AIDS patients (independent variable) was correlated with behavior towards AIDS patients (dependent variable). This correlation was not significant.

The same held true for attitudes and behavior towards gay men.

Attitudes towards gay men (independent variable) was correlated with behavior towards gay men (dependent variable). Beliefs about AIDS was the constant variable. There was no significant correlation.

Because behavior towards AIDS patients and behavior towards gay men were interrelated, they were combined into one variable, renamed, behavior towards AIDS patients and gay men. Beliefs about AIDS was the constant variable. Attitudes towards AIDS patients and gay men was the independent variable. Again, there was no significant correlation.

When the two variables, beliefs about AIDS and attitudes towards AIDS patients and/or gay men were separated, the partial correlations had less strength. These findings suggest that attitudes need to be examined in conjunction with beliefs to determine the effects on

behavior towards AIDS patients and gay men.

#### CHAPTER 5

# Summary

In this chapter a summary of the research study, its limitations, and implications for nursing practice and research will be presented.

# Research Summary

This study was designed to describe the relationship between a nurse's beliefs about AIDS and homosexuality and behavior towards providing health care for AIDS patients and gay men. The literature review addressed three areas: (a) health care professionals' knowledge about AIDS, (b) health care professionals' attitudes about AIDS, and (c) health care professionals' attitudes about homosexuality.

The literature review revealed a small number of studies in these three areas. Research findings indicated that health care professionals' have negative attitudes towards AIDS patients, particularly homosexuals with AIDS. Health care professionals may have AIDS knowledge, but knowledge alone may not change their negative attitudes towards AIDS patients and homosexuals with AIDS. Further research was needed to examine the relationship between a nurse's beliefs and attitudes about AIDS and homosexuality, and how these influence a nurse's intention and behavior towards caring for AIDS patients and homosexuals.

Ajzen and Fishbein's theory of reasoned action (1980) was the conceptual framework applied in this study. The theory of reasoned action provided a framework for understanding the relationship among nurses' attitudes, subjective norms, and intentions towards caring for

AIDS patients and homosexuals. The conceptual framework addressed the relationship between a nurse's beliefs about AIDS and homosexuality and attitudes and behaviors towards providing health care for AIDS patients and gay men.

The research questions for this study were:

- 1. What beliefs and attitudes about AIDS and homosexuality influence a nurse's intention and behavior towards caring for AIDS patients and gay men?
  - 2. What are a nurse's beliefs about AIDS and homosexuality?
- 3. What are a nurse's attitudes about caring for people with AIDS and gay men?
- 4. What is the relationship between a nurse's experience in caring for AIDS patients and her beliefs about AIDS and homosexuality?
- 5. What is the relationship between a nurse's knowledge of AIDS and her beliefs about AIDS and homosexuality?
- 6. How important are others' beliefs about caring for AIDS patients and homosexuals to a nurse who cares for these patients?

A descriptive correlational design was selected for the research study. The sample included 35 registered nurses employed by a teaching hospital in the Northwest United States. These subjects were selected by nonprobability convenience sampling to complete a questionnaire measuring knowledge about AIDS, beliefs about AIDS and homosexuality, and attitudes and behaviors towards providing health care for AIDS patients and gay men. The sample was primarily white women, with a bachelor of science in nursing, and an average of nine years of

clinical experience.

Descriptive statistics were used to describe the sample. The variables were correlated using Pearson's correlation coefficients to test the relationships stated in the study questions. Then, partial correlations were computed to determine the influence of selected variables in predicting behavior towards AIDS patients and gay men.

The sample had a high degree of general knowledge about AIDS, particularly high risk behaviors, but were less knowledgeable about low risk behaviors. Nurses reported multiple sources of information about AIDS, with the majority identifying AIDS inservices as most helpful.

No statistically significant results were found for the relationships between variables in the research questions, but statistically significant results were found for relationships among other variables in the model for the study. These variables were (a) knowledge and negative attitudes towards providing health care for AIDS patients and gay men (r=-0.45, p=.001), (b) knowledge and intention to provide health care to AIDS patients and gay men (r=.33, p=.01), (c) knowledge and negative behavior towards AIDS patients and gay men (r=-0.42, p=.01), (d) beliefs about AIDS and intention to provide health care to AIDS patients and gay men (r=.54, p=.001), (e) beliefs about AIDS and negative attitude towards gay men (r=-0.54, p=.001), and (f) beliefs about AIDS and negative attitudes towards AIDS patients and gay men (r=-0.54, p=.001). All of these significant relationships were consistent with the model for the study based on Ajzen and Fishbein's theory of reasoned action.

### Limitations

A major limitation of the study was the sample size. The response rate was 36% (N=35), suggesting a potentially biased sample who provided health care for AIDS patients with less negative attitudes and behaviors than those nurses' who did not respond. Replication of the study with a larger sample size, including nurses from a variety of specialties (mental health, obstetrics, critical care), would improve generalizability of the results to a larger nursing population.

Another limitation was the questionnaire developed for the study. This instrument has no established reliability and only content validity. Also, refinement of the instrument is needed. Additional questions on attitudes towards providing health care for AIDS patients and gay men are required to adequately measure this variable.

Limitations exist in measuring attitudes. Accuracy in self reported behaviors cannot be assumed. Individuals may answer questions as they think they should, rather than as they really feel. They may consider the social desirability of their statements. Therefore, some measurement of social desirability within the questionnaire would clarify the results.

An additional drawback exists in Ajzen and Fishbein's reasoned action model. A major assumption of the reasoned action model involves rational thought. Individuals are assumed to be rational people who primarily use information to make judgments, form evaluations, and arrive at decisions. The model lacks psychological components, such as personality characteristics and emotions, which often influence a

person's beliefs, attitudes, and behavior.

Nursing Implications for Practice and Research

These findings have practice implications for nurses in the areas of education, standards of care, and psychosocial issues for the nurse and the person with AIDS.

Continuing education is needed for nurses to broaden their knowledge about AIDS. For example, knowledge about risk factors is uneven given that low risk factors are not as well understood as high risk factors. The AIDS information base is growing rapidly and information can be outdated within a few months. In order to provide information to individuals, nurses need updated knowledge of transmission, precautions, safe sex practices, and community resources.

Nursing standards of care for people with AIDS, ARC, and positive HIV antibodies will need to be developed. These standards need to take into consideration the physical, psychological, and social concerns of these individuals.

The psychosocial stress experienced by AIDS clients, family, friends, and care-givers is also a challenge for nurses. People with AIDS are faced with stigma, rejection, and judgement, as well as, economic issues such as loss of work, income, and housing. Many of the emotional and social reactions that occur with AIDS patients can occur with families and friends. Also, there may be additional conflicts between family members and the patient regarding lifestyle and/or sexual orientation. Research in these practice areas could provide useful information for nurses.

Caring for patients with AIDS can be stressful for nurses. The physical and emotional needs of hospitalized AIDS patients can be overwhelming. Often, the person with AIDS is about the same age as the nurse and caring for a younger person facing death can lead to frustration and hopeless feelings. Dealing with a critically ill patient may be magnified by uneasiness with the patient's sexual orientation and lifestyle. Negative social attitudes and personal prejudices may surface. Education addressing lifestyles of gay men and attitude sensitization may decrease anxiety and biases.

Recommendations for future research include prevention, health promotion, and education. Research examining (a) nursing interventions in various settings; (b) interventions altering risk behaviors associated with IV drug abuse; (c) and examining the effects of education on health care professionals and people at risk for AIDS are areas to consider. Research could include more in depth descriptions of people's (with AIDS, HIV, and their families) responses to illness, quasi-experimental designs to test intervention strategies for primary and secondary prevention, and attention to less recognized populations, such as women and children.

## References

- Abrams, D.I., Dilley, J.W., Maxey, L.M., & Volberding, P.A. (1986).

  Routine care and psychosocial support of the patient with the acquired immunodeficiency syndrome. <u>Medical Clinics of North America</u>, 70(3), 707-720.
- Ajzen, I., & Fishbein, M. (1970). The prediction of behavior from attitudinal and normative variables. <u>Journal of Experimental</u>
  <u>Social Psychology</u>, 6, 466-487.
- Ajzen, I., & Fishbein, M. (1974). Factors influencing intentions and the intention-behavior relation. <u>Human Relations</u>, <u>27</u>, 1-15.
- Ajzen, I., & Fishbein, M. Attitude-behavior relations: A theoretical analysis and review of empirical research. <u>Psychological</u>

  <u>Bulletin</u>, <u>84</u>, 888-918.
- Ajzen, I., & Fishbein, M. (1980). <u>Understanding attitudes and predicting social behavior</u>. New Jersey: Prentice-Hall.
- Amchin, J., & Polan, H.J. (1986). A longitudinal account of staff adaptation to AIDS patients on a psychiatric unit. Hospital and Community Psychiatry, 37(12), 1235-1238.
- Bennett, J. (1987). Nurses talk about the challenge of AIDS.

  <u>American Journal of Nursing</u>, 9, 1150-1155.
- Bennett, J. (1987). What we know about AIDS. American Journal of Nursing, 9, 1016-1020.

- Blumenfield, P.J., Milazzo, J., Seropian, S., & Wormser, G.P. (1987).

  Survey of attitudes of nurses working with AIDS patients. General

  Hospital Psychiatry, 9, 58-63.
- Buczala, S. & Garrard, M. (1988). A survey of college women regarding their knowledge, perception, and behavior about AIDS. Unpublished master's thesis, Oregon Health Sciences University School of Nursing, Portland, Oregon.
- Centers for Disease Control (1986). Update: Acquired immunodeficiency syndrome-United States. Morbidity and Mortality Weekly Report, 35, 757-765.
- Centers for Disease Control (1987). Acquired immunodeficiency syndrome-United States. Morbidity and Mortality Weekly Report, 36, 522-526.
- Christ, G.H., & Weiner, L.S. (1985). Psychosocial issues in AIDS. In

  V. T. Devita, S. Hillman, & S.A. Rosenburg (Eds.), AIDS:

  Etiology, diagnosis, treatment, and prevention. New York: J.B.

  Lippincott.
- Cooke, M. (1987). Learning to care: Health care workers respond to AIDS. Focus: A Review of AIDS Research, 2(7), 1-2.
- Curran, J.W., & Morgan, W.M. (1987). AIDS in the United States:

  Future trends. In J.C. Gluckman & E. Vilmer, <u>Acquired</u>

  <u>immunodeficiency</u> syndrome. Paris: Elsevier.
- Davidhizar, R. (1907). Measuring attitudes of clients with schizophrenia using Fishbein's expectancy-value model. Archives of Psychiatric Nursing, 7(3), 208-214.

- Douglas, D.J., Kalman, C.M., & Kalman, T.P. (1985). Homophobia among physicians and nurses: An empirical study. <u>Hospital and Community Psychiatry</u>, 36(12), 1309-1311.
- Dupree, J.D., & Margo, G. (1988). Homophobia, AIDS, and the health care professional. <u>Focus: A Review of AIDS Research</u>, 3(2), 1-2.
- Durham, J.D., & Cohen, F.L. (1987). <u>The person with AIDS: Nursing perspectives</u>. New York: Springer Publications.
- Feinblum, S. (1986). Pinning down the psychosocial dimensions of AIDS. Nursing Health Care, 7(5), 254-257.
- Fishbein, M., Jaccard, J.J., Davidson, A.B., Ajzen, I., & Loken, B.

  (1980). Predicting and understanding family planning behaviors:

  Beliefs, attitudes, and intention. In I. Ajzen & M. Fishbein

  (Eds.), <u>Understanding attitudes and predicting social behavior</u>.

  (pp. 131-147). New Jersey: Prentice-Hall.
- Flaskerud, J.H. (1987). AIDS: Psychosocial aspects. <u>Journal of Psychosocial Nursing</u>, 25, 8-16.
- Ghitelman, D. (1987). What doctors think about AIDS. MD, 1, 89-100.
- Hartnett, S.M. (1987). A hospital-wide AIDS educational program.

  Journal of Continuing Education in Nursing, 18(2), 64-67.
- Heckler, B.I., & Ajzen, I., (1983). Improving the prediction of health behavior: An approach based on the theory of reasoned action. Academic Psychology Bulletin, 5, 11-19.
- Hudson, W.H., & Ricketts, W.A. (1980). A strategy for the measurement of homophobia. <u>Journal of Homosexuality</u>, <u>5</u>(4), 357-372.

- Jaccard, J.J. (1974). Predicting social behavior from personality traits. <u>Journal of Experimental Research in Personality</u>, 7, 358-367.
- Jaccard, J.J., & Davidson, A.R. (1972). Toward an understanding of
   family planning behaviors: An initial investigation. Journal of
   Applied Social Psychology, 2, 228-235.
- Kelly, J.A., St. Lawrence, J.S., Smith, S., Hood, H.V., & Cook, D.J.
  (1987a). Stigmatization of AIDS patients by physicians. <u>American</u>
  <u>Journal of Public Health</u>, 77(7), 789-791.
- Kelly, J.A., St. Lawrence, J.S., Smith, S., Hood, H.V., & Cook, D.J. (1987b). Medical students' attitudes toward AIDS and homosexual patients. <u>Journal of Medical Education</u>, 62, 549-556.
- Kelly, J.A., St. Lawrence, J.S., Smith, S., Hood, H.V., & Cook, D.J.

  (1988). Nurses' attitudes towards AIDS. <u>Journal of Continuing</u>

  <u>Education in Nursing</u>, <u>19</u>(2), 78-83.
- Layon, J., Warzyneki, M., & Idris, A. (1986). Acquired immunodeficiency syndrome in the United States: A selective review. Critical Care Medicine, 14(9), 819-827.
- Mathews, W.C., Booth, M.W., Turner, J.D., & Kessler, L. (1986).

  Physician's attitudes toward homosexuality: Survey of a

  California county medical society. Western Journal of Medicine,

  144(1), 106-110.
- Mills, S. (1986). Attitudes and trends: Public perception of AIDS.

  Focus: A Review of AIDS Research, 3(2), 1-2.

- National Institute of Mental Health. (1987). <u>Coping with AIDS</u>.

  Washington, DC: U.S. Government Printing Office.
- Ostrom, T.M. (1969). The relationship between the affective, behavioral, and cognitive components of attitude. <u>Journal of Experimental Social Psychology</u>, 5, 12-30.
- Owen, W.F. (1986). The clinical approach to the male homosexual patient. <u>Medical Clinics of North America</u>, 70(3), 499-535.
- Pender, N.J., & Pender, A.R. (1986). Attitudes, subjective norms, and intentions to engage in health behaviors. <a href="Nursing Research">Nursing Research</a>, <a href="35(1)">35(1)</a>, 15-18.
- Polan, H.J., & Amchin, J. (in press). Treating AIDS patients.

  Hospital and Community Psychiatry.
- Reed, P., Wise, T.N., & Mann, L.S. (1984). Nurses' attitudes regarding acquired immunodeficiency syndrome. Nursing Forum, 21(4), 153-156.
- Richardson, J.L., Lochner, T., McGurgan, K., & Levine, A.M. (1987).

  Physician attitudes and experience regarding the care of patients with acquired immunodeficiency syndrome (AIDS) and related disorders (ARC). Medical Care, 25(8), 675-685.
- Royse, D., & Birge, B. (1987). Homophobia and attitudes towards AIDS patients among medical, nursing, and paramedical students.

  <u>Psychological Reports</u>, 61, 867-870.
- Salisbury, D.M. (1986). AIDS: Psychosocial implications. <u>Journal of</u>
  Psychosocial Nursing, 24(12), 13-16.

- Saltzer, E.B. (1980). Social determinants of successful weight loss:

  An analysis of behavioral intentions and actual behavior. Basic

  and Applied Social Psychology, 1, 329-342.
- Schlegel, R.P., Crawford, C.A., & Sanborn, M.D. (1977).

  Correspondence and mediational properties of the Fishbein model:

  An application to adolescent alcohol use. <u>Journal of Experimental Social Psychology</u>, 13, 421-430.
- Schoffner, B. (1987). Psychological impact of AIDS upon the social environment, health care providers, families, friends, and methods of modification. In J.C. Gluckman & E. Vilmer. <u>Acquired</u> immunodeficiency syndrome. Paris: Elsevier.
- Sejwacz, D., Ajzen, I., & Fishbein, M. (1980). Predicting and understanding weight loss: Intentions, behaviors, and outcomes.

  In I. Ajzen & M. Fishbein (Eds.), <u>Understanding attitudes and predicting social behavior</u>. (pp. 102-112). New Jersey:

  Prentice-Hall.
- St. Lawrence, J.S., Husfeldt, B.A., Kelly, J.A., Hood, H.V., & Smith, S. (1986). The stigma of AIDS: Fear of disease and prejudice towards gays. <u>Journal of Homosexuality</u>, 3(2), 216-226.
- Steele, S.M. (1986). AIDS: Clarifying values to close in on ethical questions. <u>Nursing and Health Care</u>, 7(5), 246-248.
- Simmons-Alling, S. (1984). AIDS: Psychosocial needs of the health care worker. Topics in Clinical Nursing, 6, 31-37.

- Wertz, D.C., Sorenson, J.R., Liebling, L., Kessler, L., & Heeren, T. (1987). Knowledge and attitudes of AIDS health care providers before and after education programs. <u>Public Health Reports</u>, <u>102</u>(3), 248-254.
- Wolcott, D.L., Namir, S., Fawzy, F.I., Gottlieb, M.S., & Mitsuayasu, R.T. (1986). Illness concerns, attitudes towards homosexuality, and social support in gay men with AIDS. <u>General Hospital</u>

  <u>Psychiatry</u>, 8, 395-403.
- Young, E.W. (1988). Nurses' attitudes toward homosexuality: Analysis of change in AIDS workshops. <u>Journal of Continuing Education in Nursing</u>, 19(1), 9-12.
- Zuger, A. (1987). Professional responsibilities in the AIDS generation. <u>Hastings Center Report</u>, <u>17</u>(3), 16-23.

### APPENDIX A

Questionnaire

This questionnaire contains several sections. Please read the directions before beginning each section, and please answer each question. Thank you for participating in this study.

I.	<u>Directions:</u> This section seeks basic information about yourself. <u>cle</u> your answer.	<u>Please</u>
1.	Sex: (1) Female (2) Male	
2.	Ethnicity: 1. Caucasian 2. Black 3. Hispanic 4. Asian 5. Native American 6. Other	
3.	Education: 1. Associate degree in Nursing 2. Diploma in Nursing 3. Bachelor of Science in Nursing 4. Master's degree in Nursing 5. Doctoral degree	
4.	How old are you? (Years)	
5.	How many years of professional nursing experience?	
6.	Have you provided health care for AIDS patients? (1) Yes (2) No	
7.	Approximately how many AIDS patients have you cared for in the last year?	
8.	Have you provided health care for men whom you have known or believed were gay? (1) Yes (2) No	
9.	Approximately how many gay men have you cared for in the last year?	
Do y	you personally know anyone who: (1) Yes (2) No	
10.	Has AIDS. Y N	
11.	Has AIDS Related Complex (ARC). Y N	
12.	Is HIV positive. Y N	
13.	Is at risk for AIDS. Y N	

II. This section asks what you <u>believe</u> to be true about AIDS. Indicate whether spreading the AIDS virus by each action below is Very High Risk (VHR), High Risk (HR) Moderate Risk (MR), Low Risk (IR), Very Low Risk (VIR), or No Risk (NR). <u>Please circle your answer</u>.

		Very High <u>Risk</u> (6)	High <u>Risk</u> (5)	Mod. <u>Risk</u> (4)	Low <u>Risk</u> (3)	Very Low <u>Risk</u> (2)	No <u>Risk</u> (1)	
14.	Using public rest rooms.	VHR	HR	MR	LR	VLR	NR	
15.	Sharing eating utensils with a person with AIDS.	VHR	HR	MR	IR	VLR	NR	
16.	Living in the same house- hold with someone who has AIDS.	VHR	HR	MR	LR	VLR	NR	
17.	Passing the virus to an unborn baby when the mother is infected.	VHR	HR	MR	LR	VLR	NR	
18.	Receiving a blood trans- fusion <u>today</u> .	VHR	HR	MR	LR	VLR	NR	-
19.	Sharing drug needles or other drug injection equipment.	VHR	HR	MR	LR	VLR	NR	
20.	Social kissing or "dry" kissing.	VHR	HR	MR	LR	VLR	NR	
21.	Intimate kissing or "wet/ French/deep" kissing.	VHR	HR	MR	LR	VLR	NR	
22.	Having sex with a bisexual man without using condoms.	VHR	HR	MR	LR	VLR	NR	. —
23.	Having sex without using condoms with someone who uses IV drugs.	VHR	HR	MR	IR	VLR	NR	

Indicate whether the following statements are Yes (Y), No (N) or Don't Know (DK). Please circle your answer.

		<u>Yes</u> (1)	<u>No</u> (2)	Don't Know (0)	
24.	The use of condoms during sex lowers the risk of getting AIDS.	Y	N	DK	
25.	AIDS is a disease that causes the body to be unable to fight off infections.	Y	N	DK	_
26.	Only gay men contact AIDS.	Y	N	DK	
27.	Learning more about a sexual partner's background is one way to reduce the chance of getting AIDS.	Y	N	DK	
20		-	_		
28.	AIDS is curable.	Y	N	DK	
29.	Long-term mutually monogamous relationships (where no other sexual partners are involved) are at a lower risk for AIDS infection.	Y	N	DK	
30.	Lesbian women who do not use IV drugs or receive artificial insemination are not at risk for AIDS.	Y	И	DK	
31.	A positive AIDS antibody blood test means the person has been exposed to the AIDS virus, and may get AIDS in the future.	Y	N	DK	

The following sources have been used by you for AIDS information:

	_			
		<u>Yes</u> (1)	<u>No</u> (2)	
32.	TV/radio	Y	N	
33.	Newspapers/Magazines	Y	N	
34.	Pamphlets/Posters on AIDS	Y	N	-

35.	Friends/Relatives	Y	N	-
36.	Health Care Professionals	Y	N	
37.	Professional Journals	Y	N	
38.	AIDS presentations, inservices, or workshops at place of employment	Y	N	
39.	Other, please name			
40.	Circle the one most helpful source.			

III. Please indicate your  $\underline{\text{beliefs about AIDS}}$  by circling SA (Strongly Agree), A (Agree), D (Disagree), or SD (Strongly Disagree).

		Strongly <u>Agree</u> (4)	Agree (3)	<u>Disagree</u> (2)	Strongly <u>Disagree</u> (1)	
41.	No matter what the public has been told, AIDS is easier to acquire than scientists convey.	SA	A	D	SD	
Pers	ons with AIDS should be allowed to	;				
42.	Live in an apartment building.	SA	A	D	SD	
43.	Attend a public school.	SA	A	D	SD	
44.	Use public restrooms.	SA	A	D	SD	
45.	Get married.	SA	A	D	SD	
46.	Maintain a job.	SA	A	D	SD	
47.	Ride in public transportation.	SA	A	D	SD	
48.	Receive treatment only in clinics and hospitals designated for AIDS patients.	SA	A	D	SD	
49.	Have the same access to health care as other patients.	SA	A	D	SD	
50.	Provide informed consent before testing for HIV antibodies.	SA	A	D	SD	

This section asks for your <u>beliefs about homosexuality</u>. Please indicate your belief by circling SA (Strongly Agree), A (Agree), D (Disagree), SD (Strongly Disagree).

		Strongly <u>Agree</u> (1)	Agree (2)	<u>Disagree</u> (3)	Strongly <u>Disagree</u> (4)	
51.	I would feel comfortable working closely with a male homosexual.	SA	A	D	SD	
52.	I would feel uncomfortable if I learned that my neighbor was homosexual.	SA	A	D	SD	
53.	I would feel comfortable if a member of my sex made an advance toward me.	SA	A	D	SD	_
54.	I would be comfortable if I found myself attracted to a member of my sex.	SA	A	D	SD	
55.	I would feel nervous being in a group of homosexuals.	SA	Α	D	SD	
56.	I would be upset if I learned that my brother or sister was homosexual.	SA	A	D	SD	
57.	If I saw two men holding hands in public I would feel disgusted.	SA	A	D	SD	
58.	If a member of my sex made an advance toward me I would be offended.	SA	A	D	SD	
59.	I would feel at ease talking with a homosexual person at a party.	SA	A	D	SD	<del></del>
60.	I would feel comfortable if I learned that my best friend of my sex was homosexual.	SA	A	D	SD	

IV. Please indicate your <u>attitude</u> towards providing health care for AIDS patients and gay men by circling SA (Strongly Agree), A (Agree), D (Disagree), SD (Strongly Disagree).

		Strongly <u>Agree</u> (4)	Agree (3)	<u>Disagree</u> (2)	Strongly <u>Disagree</u> (1)	
61.	Gay men with AIDS are responsible for acquiring their illness.	SA	A	D	SD	
62.	I am now less accepting of gay lifestyles because of AIDS.	SA	A	D	SD	-
63.	I am sympathetic to the problems caused by AIDS in the gay community.	SA	A	D	SD	
64.	I am fearful of providing health care to gay men because of AIDS.	SA	A	D	SD	
65.	I would be (am) upset about handling blood products from an AIDS patient.	SA	A	D	SD	
66.	Providing health care for AIDS patients is personally rewarding to me.	SA	Α	D	SD	
67.	My <u>close friends</u> would support my providing health care for <u>AIDS patients</u> .	SA	A	D	SD	
68.	I am influenced by what my close friends think about this.	SA	А	D	SD	
69.	My <u>family</u> would support my providing health care for <u>AIDS</u> <u>patients</u> .	SA	А	D	SD	<u></u>
70.	I am influenced by what my family thinks about this.	SA	A	D	SD	
71.	My <u>co-workers</u> would support my providing health care for <u>AIDS</u> <u>patients</u> .	SA	A	D	SD	

					/ (	,
72.	I am influenced by what my co- workers think about this.	SA	A	D	SD	
73.	My <u>close friends</u> would support my providing health care for <u>gay men</u> .	SA	A	D	SD	
74.	I am influenced by what my close friends think about this.	SA	A	D	SD	
75.	My <u>family</u> would support my providing health care for <u>gay</u> <u>men</u> .	SA	Α	D	SD	
76.	I am influenced by what my family thinks about this.	SA	A	D	SD	
77.	My <u>co-workers</u> would support my providing health care for <u>gay</u> <u>men</u> .	SA	A	D	SD	
78.	I am influenced by what my co- workers think about this.	SA	A	D	SD	
79.	I intend to provide health care for AIDS patients.	SA	A	D	SD	
80.	I intend to provide health care for gay men.	SA	A	D	SD	

VI. This section concerns your <u>behavior</u> towards providing health care for patients. Please indicate your answer by <u>circling</u> Never, Rarely, Sometimes, Often, or Always.

## When I have contact with a patient's blood or body substances I:

		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	
81.	Wear gloves when the patient is known to be HIV positive.	Never	Rarely	Some- times	Often	Always	
82.	Wear gloves when the patient has known high-risk behavior.	Never	Rarely	Some- times	Often	Always	

83.	Wear gloves for all gay patients.	Never	Rarely	Some- times	Often	Always	
84.	Wear gloves for all patients.	Never	Rarely	Some- times	Often	Always	
When	n providing health care for AII	OS/HIV pos	sitive pat	cients I:			
85.	Avoid unnecessary entry into the patient's room.	Never	Rarely	Some- times	Often	Always	
86.	Wear gloves during contact with bed linen and clothes.	Never	Rarely	Some- times	Often	Always	To a second disconnection of
87.	Wear a gown in the room when having physical contact with the patient.	Never	Rarely	Some- times	Often	Always	
88.	Wear gloves when emptying urinals or bedpans.	Never	Rarely	Some- times	Often	Always	1
When	n providing health care for gay	y patients	ş I:				
89.	Avoid unnecessary entry into the patient's room.	Never	Rarely	Some- times	Often	Always	
90.	Wear gloves during contact with bed linen and clothes.	Never	Rarely	Some- times	Often	Always	
91.	Wear a gown in the room when having physical contact with the patient.	Never	Rarely	Some- times	Often	Always	
92.	Wear gloves when emptying urinals or bedpans.	Never	Rarely	Some- times	Often	Always	
Com	ments:						

### APPENDIX B

Index of Homophobia Scale

### INDEX OF HOMOPHOBIA (IHP)

This questionnaire is designed to measure the way you feel about working or associating with homosexuals. Answer each item as carefully and accurately as you can by placing a number beside each one as follows:

- 1. Strongly agree
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree

homosexual.

5. Strongly disagree

### Please begin.

*1.	I would feel comfortable working closely with a male homosexual.	
2.	I would enjoy attending social functions at which homosexuals were present.	
<b>*</b> 3.	I would feel uncomfortable if I learned that my neighbor was homosexual.	
4.	If a member of my sex made a sexual advance toward me I would feel angry.	_
5.	I would feel comfortable knowing that I was attractive to members of my sex.	
6.	I would feel uncomfortable being seen in a gay bar.	
<b>*</b> 7.	I would feel comfortable if a member of my sex made an advance toward me.	
<b>*8.</b>	I would be comfortable if I found myself attracted to a member of my sex.	
9.	I would feel disappointed if I learned my child was homosexual.	*******
10.	I would feel nervous being in a group of homosexuals.	
11.	I would feel comfortable knowing that my clergyman was	

*12.	I would be upset if I learned that my brother or sister was homosexual.	
13.	I would feel that I had failed as a parent if I learned that my child was gay.	
*14.	If I saw two men holding hands in public I would feel disgusted.	
*15.	If a member of my sex made an advance toward me I would be offended.	
16.	I would feel comfortable if I learned that my daughter's teacher was a lesbian.	
17.	I would feel uncomfortable if I learned that my spouse or or partner was attracted to members of his or her sex.	
*18.	I would feel at ease talking with a homosexual person at a party.	
19.	I would feel uncomfortable if I learned my boss was a homosexual.	
20.	It would not bother me to walk through a predominantly gay section of town.	
21.	It would disturb me to find out that my doctor was homosexual.	
	I would feel comfortable if I learned that my best friend of my sex was homosexual.	
23.	If a member of my sex made an advance toward me I would feel flattered.	•
	I would feel uncomfortable knowing that my son's male teacher was homosexual.	
	I would feel comfortable working closely with a female homosexual.	

Star items were retained in the questionnaire for this study.

### APPENDIX C

Omitted Items From the Index of Homophobia Scale

### Omitted Items From the Index of Homophobia Scale

- I would enjoy attending social functions at which homosexuals were present.
- 4. If a member of my sex made a sexual advance toward me I would feel angry.
- 5. I would feel comfortable knowing that I was attractive to members of my sex.
- 6. I would feel uncomfortable being seen in a gay bar.
- 9. I would feel disappointed if I learned that my child was homosexual.
- 11. I would feel comfortable knowing that my clergyman was homosexual.
- 13. I would feel that I had failed as a parent if I learned that my child was gay.
- 16. I would feel comfortable if I learned that my daughter's teacher was a lesbian.
- 17. I would feel uncomfortable if I learned that my spouse or partner was attracted to member of his or her sex.
- 19. I would feel uncomfortable if I learned my boss was homosexual.
- 20. It would not bother me to walk through a predominantly gay section of town.
- 21. It would not disturb me to find out my doctor was homosexual.
- 23. If a member of my sex made an advance toward me I would feel flattered.
- 24. I would feel uncomfortable knowing that my son's male teacher was homosexual.
- 25. I would feel comfortable working closely with a female homosexual.

APPENDIX D

Consent Form

# The Oregon Health Sciences University Consent Form

- 1. Nancy Bachman, RN, BSN, is doing a research study called "Nurses' Attitudes and Behaviors Towards AIDS Patients and Gay Men". The purpose of the study is to examine nurses' beliefs about AIDS and homosexuality and their attitudes and behaviors towards providing health care for AIDS patients and gay men.
- 2. If I agree to be in the study, I understand I will complete a questionnaire regarding my beliefs, attitudes, and behaviors towards providing health care for AIDS patients and gay men. The questionnaire will take approximately 20 minutes to complete.
- 3. It has been explained to me that neither my name nor my identity will be used for publication or publicity purposes. My answers on the questionnaire will remain anonymous and my name will not be recorded on the questionnaire. The researcher is not aware of any physical risks or discomforts that may result from this research. I understand there will be no cost to me.
- 4. I understand there is no direct benefit to me, except the chance to express my opinions. The researcher will share the results of this study with me. In the future, nurses may benefit indirectly by policy decisions regarding nursing care for AIDS patients.
- 5. I have talked with Nancy Bachman and she has offered to answer any questions I have. I can telephone Ms. Bachman at 641-2048, or her research advisor Dr. Barbara Limandri at 279-7827.
- 6. I understand that I may refuse to participate, or withdraw from this study at any time without affecting my relationship with, or treatment at, the Oregon Health Sciences University.
- 7. I have read the foregoing and agree to participate in the study.

Subjects's Signature	
	Date
Witness	
	Date

### APPENDIX E

Cover Letter to Participants

# OREGON HEALTH SCIENCES UNIVERSITY SCHOOL OF NURSING

Dear

I am a graduate student currently working on my master's thesis, "Nurses' Attitudes and Behaviors Towards AIDS Patients and Gay Men", under the supervision of Barbara J. Limandri, RN, D.N.Sc.

I am inviting you to participate in this study. Your participation is voluntary and there will be no consequence if you choose not to participate or decide to withdraw. Your part in this study includes filling out a questionnaire measuring knowledge about AIDS, beliefs about AIDS and homosexuality, and attitudes and behaviors towards providing health care for AIDS patients and/or gay men. It will take approximately 20 minutes of your time. Your response will not be identified individually. Employers and supervisors will not have access to information about individuals or whether or not you participate. I will be available for questions and/or comments during and after completion of the questionnaire. I will also be willing to share the results of this study with you.

I will be visiting your unit on \_\_\_\_\_\_\_, and will be available for questions at that time. We will then set up times for completing the questionnaires, which will be approximately between July and , 1988.

I am looking forward to meeting you and sharing more information about my study.

Sincerely,

Nancy Bachman, RN

### APPENDIX F

Nurses' Beliefs About Homosexuality Using A Modified Version of the Index of Homophobia Scale

Nurses' Beliefs About Homosexuality Using a Modified Version of the

<u>Index of Homophobia Scale</u> (N=35)

	Strongly			Strongly
	<u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	Disagree
I would feel comfortable	15	17	3	0
working closely with a male	(43%)	(49%)	(8%)	(0%)
homosexual.				
I would feel uncomfortable if I	12	13	6	4
learned that my neighbor was	(34%)	(37%)	(17%)	(11%)
homosexual.				
I would feel comfortable if a	0	6	18	11
member of my sex made an	(0%)	(17%)	(51%)	(31%)
advance toward me.				
I would be comfortable if I	2	6	21	6
found myself attracted to a	(6%)	(17%)	(60%)	(17%)
member of my sex.				
I would feel nervous being in a	10	17	8	0
group of homosexuals.	(28%)	(49%)	(23%)	(0%)

	Strongly			Strongly
	Agree	Agree	<u>Disagree</u>	<u>Disagree</u>
I would be upset if I learned	5	13	14	3
my brother or sister were	(14%)	(37%)	(40%)	(9%)
homosexual.				
If I saw two men holding hands	9	17	8	1
in public I would feel	(25%)	(49%)	(23%)	(3%)
disgusted.				
If a member of my sex made an	2	18	10	5
advance toward me I would be	(6%)	(51%)	(29%)	(14%)
offended.				
I would feel at ease talking	18	15	2	0
with a homosexual person at a	(51%)	(43%)	(6%)	(0%)
party.				
I would feel comfortable if I	7	10	18	0
learned that my best friend of	(20%)	(29%)	(51%)	(0%)
my sex was homosexual.				

### AN ABSTRACT OF THE THESIS OF

#### NANCY TERRY BACHMAN

Date of Receiving this Degree: June, 1989

TITLE: NURSES' ATTITUDES AND BEHAVIORS TOWARDS AIDS

PATIENTS AND GAY MEN

APPROVED:

Barbara J. Limandri, R.N., D.N.Sc., Thesis Advisor

The purpose of this descriptive correlational study was to describe the relationship between nurses' beliefs about ATDS and homosexuality and their attitudes and behaviors towards providing health care for AIDS patients and gay men.

The specific research questions this study sought to answer were:

- 1. What are a nurse's beliefs about AIDS and homosexuality?
- 2. What are a nurse's attitudes about caring for people with AIDS and gay men?
- 3. What is the relationship between a nurse's experience in caring for AIDS patients and her beliefs about AIDS and homosexuality?
- 4. What is the relationship between a nurse's knowledge of AIDS and her beliefs about AIDS and homosexuality?
- 5. How important are others beliefs about caring for AIDS patients and homosexuals to a nurse who provides care for these patients?
- 6. What beliefs and attitudes about AIDS and homosexuality influence a nurse's intention and behavior towards providing health care for AIDS patients and gay men?

A questionnaire measuring knowledge about AIDS, beliefs about AIDS and homosexuality, and attitudes and behaviors towards AIDS patients and gay men was administered to a nonprobability convenience sample of 35 nurses at a hospital in the Northwest United States. The sample was primarily white women, with a bachelor of science in nursing, and an average of nine years of clinical experience. Data analysis was done using descriptive statistics, Pearson correlation coefficients, and partial correlations.

This sample had a high degree of general knowledge about AIDS and high risk behaviors, but less knowledge about casual transmission.

Nurses reported multiple sources of information about AIDS with the majority identifying employment inservices as the most helpful.

The research findings were not significant between each of the selected variables in the study questions, but there were statistically significant results between several other variables. These variables were (a) knowledge and negative attitudes towards providing health care for AIDS patients and gay men (r = -0.45, p = .001), (b) knowledge and intention to provide health care to AIDS patients and gay men (r = .33, p = .01), (c) knowledge and negative behavior towards AIDS patients and gay men (r = -0.42, p = .01), (d) beliefs about AIDS and intention to provide health care to AIDS patients and gay men (r = .54, p = .001), (e) beliefs about AIDS and negative attitude towards gay men (r = -0.54, p = .001), and (f) beliefs about AIDS and negative attitudes towards AIDS patients and gay men (r = -0.54, p = .001).

The study points out important areas for future practice and

research. Continuing education is needed for nurses to update their knowledge about AIDS. Nursing care standards need to consider the physical, psychological, and social concerns of the AIDS patient.

Recommendations for future research include prevention, health promotion, and education. Research examining (a) nursing interventions in various settings; (b) interventions altering risk behaviors associated with IV drug abuse; (c) and examining the effects of education on health care professionals and people at risk for AIDS are areas to consider. Research could include more in depth descriptions of people's (with AIDS, HIV, and their families) responses to illness, quasi-experimental designs to test intervention strategies for primary and secondary prevention, and attention to less recognized populations, such as women and children.