

## Attitudes, Subjective Norms, and Beliefs of Korean Nursing Students as Predictors of Intentions to care for HIV Disease Patients ; a Test of Theory of Reasoned Action\*

Hyera Yoo, RN., DNSc.\*\*

Human immuno deficiency virus disease, which usually progresses to Acquired Immuno-Deficiency-Syndrome(AIDS), has reached serious pandemic proportions in the world(Mann, Tarantola, & Netter, 1992). The Korean Health Department(1994) reported that, by 1992, about 500 HIV positive persons had been identified in Korea. However, the actual number of HIV positive persons, including unidentified cases, is assumed to be far greater than that reported. In addition, the incidence of HIV infection and AIDS is expected to increase.

Nursing in Korea is one of the core health care professions that educates the public about the prevention of HIV transmission and which cares for HIV disease patients. Given the current situation, Korean nursing students, who are the future nursing professionals, must be prepared appropriately in their educational setting to work with HIV disease patients. However, in North America, health care providers seem hesitant to care for this type of client.

In fact, health care providers have been described as being reluctant or unwilling to engage in caring

for HIV disease patients(Blumenfield, Smith, Milazzo, Seropian, Wormser, 1987 ; Brenner & Kauffman, 1993 ; Campbell, Maki, Willnberg, & Henry, Prince, Beard, Ivey, & Lester, 1989 ; Van Servellen, Lewis, & Leake, 1988 ; Wiley, Acklin, & Barnard, 1990). Nursing students also have been reported avoiding the care for HIV positive person (Lester & Beard, 1988 ; Wiley, Heath, & Acklin, 1988). In fact, when questioned, some nursing students responded that they would refuse, or hesitate to care for HIV disease patients when they were assigned to these patients(Wiley et al., 1988). Lester and Beard(1988) found that nursing students claimed that they should have a right to refuse to care for HIV positive persons or HIV disease patients. This phenomenon, student hesitancy to care for HIV disease patients, has drawn much attention from the nursing profession. Stating that nurses should provide equality of care for all patients, the American Nurses Association(ANA, 1986) proclaimed that caring for HIV positive persons or HIV disease patients is an ethical responsibility of professional nurses. Consequently a health problem such as AIDS or HIV positive status

---

\* Dissertation of Doctor of Nursing Science

\*\* College of Nursing Yonsei University

of patients should not result in a patient being discriminated against by the care giver.

Several factors have been identified as being related to nurses and nursing students intentions of not caring for HIV positive persons. A major influencing factor identified is students exaggerated perceptions of risk related to HIV infection (Alexander & Fitzpatrick, 1990 ; Blumenfield et al., 1987 ; Campbell et al., 1991 ; Goldenberg & Laschinger, 1991 ; Jemmott, Jemmott III, & Cruz-Collins, 1992 ; Jemmott III, Freleicher, Jemmott, 1992 ; Laschinger & Goldenberg, 1993 ; Martindale & Barnett, 1992 ; Mueller, Cerny, Amundson, & Waldron, 1992 ; Scherer, Haughey, & Wu, 1989 ; Wiley et al., 1990). Most studies report that nursing professionals who perceived a high risk of work-related HIV infection tended not to care for HIV disease patients.

Concerns about their significant others, in terms of transmission of HIV, has also been identified as influential factors in relation to nursing professionals intention to avoid care for HIV disease patients (Alexander & Fitzpatrick, 1990 ; Blumenfield et al., 1988 ; Brennan, 1993 ; Goldenberg & Laschinger, 1991 ; Laschinger & Goldenberg, 1993 ; Scherer, Haughey, & Wu, 1989). Nurses have reported that they were concerned about being stigmatized by friends or neighbors due to their career.

### Research Questions

The research questions for this study were identified as follows :

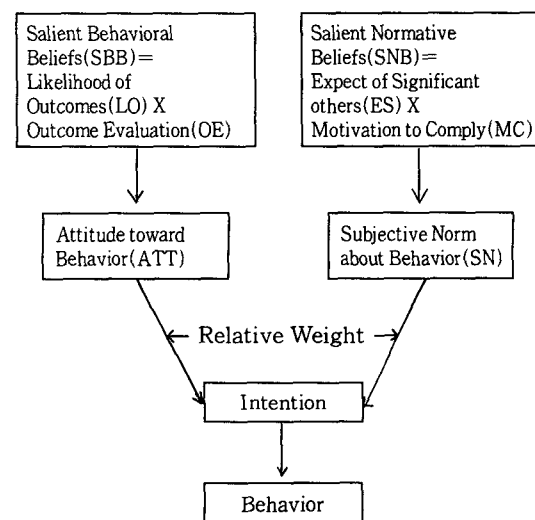
1. Are Korean nursing students attitudes toward and subjective norms about caring for patients with HIV predictors of their intentions to care for HIV patients?
2. Are Korean nursing students salient behavioral beliefs and salient normative beliefs about caring for HIV disease patients related to their attitude toward and subjective norms about caring for the patients, respectively?

3. Are Korean nursing students salient behavioral beliefs and salient normative beliefs about caring for patients with HIV predictors of their intentions to care for the patients with HIV?

### Conceptual Framework

The Theory of Reasoned Action(TRA)(Ajzen & Fishbein, 1980 ; Fishbein & Ajzen, 1975) provides a framework for understanding and predicting human behaviors. This theory consists of five propositions (Figure 1).

Figure 1. Theory of Reasoned Action



The first proposition is that human behaviors are a function of intentions that people have. Human behaviors are determined by human intentions. The second proposition is that intentions to perform or not to perform a given behavior are determined by the combination of attitudes toward the behavior and subjective norms about the behavior. The individual function or relative weight of the two factors for the intention are different depending on the intentions or individuals under investigations. The third proposition proposes that attitudes and subjective norms are determined by salient beliefs. While attitudes are determined by salient behavioral

beliefs, subjective norms are determined by salient normative beliefs. Salient behavioral beliefs, the likelihood of outcomes of a behavior, determine the attitudes, and salient normative beliefs, what significant others expect of someone in terms of performing or not performing the behavior, determine the subjective norm about the behavior. Salient behavioral beliefs are the products of both the likelihood of outcomes of a behavior and personal evaluation of the outcomes. Meanwhile salient normative beliefs are the products of what significant others expect of someone to perform or not to perform a behavior and personal motivation to comply with the expectation. Therefore, attitude is influenced by both likelihood of outcome and personal evaluation of the outcome, while subjective norm is influenced by both significant others expectation and personal motivation to comply with the expectation. Fourth, beliefs ultimately determine intention. Lastly, the fifth proposition is that beliefs determine behaviors. According to the TRA, behavioral intentions are viewed as a function of salient beliefs only when the intentions are determined by two factors: attitudes toward the behavior and subjective norms regarding the behaviors. Attitudes toward the behavior are determined by the salient beliefs about the outcomes of the behaviors and the evaluation of the outcomes. Subjective norms are determined by the salient beliefs about what significant others expect about the behavior and personal motivation to comply to the significant others suggestions.

#### Research Design

This study used a descriptive correlational design to examine the relationships among the study variables. A correlational study can explore the relationship between variables, but cannot predict causality (Borg & Gail, 1989). The relationships among the study variables were identified from the Theory of Reasoned Action (Ajzen & Fishbein, 1980). No manipulation of the variables was

intended.

#### Sample

The population of this study was Korean nursing students from which a convenience sample was drawn. Participants were selected according to the following criteria: Senior Korean nursing students who were 18 to 25 years old, female, and enrolled in baccalaureate nursing programs in Seoul, Korea. The final sample size was 186.

#### Instrumentation

One questionnaire and a demographic data form were used in this study. With permission from the authors, a standard form of the questionnaire (Ajzen & Fishbein, 1980) was used to develop a questionnaire for this study (HIV-BASIS). A Demographic Data Form was designed to obtain data that were used to describe the sample subjects. Each instrument was developed first in English and then translated into Korean. Translation was achieved using the back translation method for each instrument (Werner & Campbell, 1970). Correlation coefficient score of the instrument was .77.

#### Results

##### Demographic Characteristics

Two hundred and one questionnaires were returned for a return rate of 98%. Of these, 15 cases were eliminated when review of the questionnaires revealed more than 50% of a questionnaire was unanswered. Consequently, the final sample size was 186. The number of senior students from each nursing school answering the questionnaire ranged from 24 to 46.

The mean age of the subjects was 22.2 years of age ( $SD=1.0$ ), with a range of 20 to 26 years. All of the subjects were female (100%), and most of the subjects (99.5%) were single ( $N=185$ ). One subject (0.5%) was married but had no children. The

majority(95.7%) answered that they were heterosexuals(N=178). Two subjects revealed they were homosexual(1.1%), three(1.6%) that they were bisexual, and three(1.6%) subjects refused to indicate their sexual preferences.

There were 178 subjects(95.7%) who had studied nursing education for 4 years, 6 subjects(3.2%) had more than 4 years of nursing education, and only 2 students(1.1%) had 3 years of nursing education. One hundred and eighty-four subjects(98.9%) reported they had not cared for HIV disease patients, and 99.5% of the students(N=185) said they had not had any personal experiences with HIV infected persons.

Descriptive Statistics of the Study Variables

When examining students intention to care for HIV disease patients, over half of the students (N=106, 57.0%) responded they had positive intentions while approximately one fourth of students(N=47, 25.4%) reported negative intentions. Neutral intentions, neither positive nor negative, were also found. Thirty-three students(17.7%) replied so.

Table 1. Mean, Standard Deviation, and Range of Intentions, Attitudes, and Subjective Norms Subscales (N=186)

Subscale	Mean	SD	Negative (1-3)	Neither (4)	Positive (5-7)
Intentions	4.38	1.53	25.4%	17.7%	57.0%
Attitudes	3.60	1.08	57.5%	30.1%	11.8%
Subjective Norm	4.43	1.76	27.5%	14.0%	58.6%

The mean score of subscale 2, students attitude toward caring for HIV disease patients, showed that only 22 students(11.5%) indicated they had positive attitudes. The majority of students(N=107, 57.5%) replied they had negative attitudes toward caring for HIV disease patients. Approximately one third of the students(N=56, 30.1%) said they were neutral about caring for patients with HIV.

From the results of the subjective norm subscale (subscale 3), 109 students(58.6%) perceived their significant others would be supportive of their caring for HIV disease patients. On the other hand, 27.5% of the students(N=51) responded their significant others would not be positive about their caring for HIV infected patients. Of all the students, 26(14.0%) indicated they perceived their significant others would be neutral about their caring for HIV positive patients.

Descriptive data concerning the salient behavioral belief subscale(subscale 4) are presented in Table 2. When asked the possible outcomes of caring for HIV disease patients, 77%(N=155) replied that they could become infected with HIV from those HIV

Table 2. Frequencies, Means, and Standard Deviations of item on the Salient Behavioral Beliefs Subscale(N=186)

Items	Mean	SD	Disagree (1-3)	Neither (4)	Agree (5-7)
Salient Behavioral Beliefs					
1) Being infected with HIV from patients	4.97	1.3	23.0%	1.1%	76.9%
2) Being stigmatized by their neighbors due to the caring	4.08	1.67	32.8%	11.3%	56.9%
3) Caring HIV disease patient is physically and emotionally difficult tasks	3.53	1.18	43.0%	5.9%	51.1%
4) Being uncomfortable to care for gay persons	4.54	1.63	24.7%	2.7%	72.6%
5) Having opportunities to eliminate prejudices about gay persons	5.23	1.14	14.0%	6.5%	79.5%
6) Having opportunities to be professionals	5.59	1.17	9.7%	9.7%	80.6%

patients for whom they cared. Twenty-nine students (22%) did not believe so. Students also believed that they could be stigmatized by their neighbors due to caring for HIV disease patients. Over half of students ( $N=106$ , 56.9%) agreed with this belief. Fifty-nine students (21.8%) disagreed with this finding.

Furthermore, the majority of students ( $N=135$ , 72.5%) believed it would be uncomfortable for them to care for gay persons, while 24.7% ( $N=46$ ) of students did not believe so. Meanwhile, the belief that caring for HIV disease patients would be a physically and emotionally difficult task was supported by 117 students (51.1%), while 80 students (43.0%) disagreed.

While nearly 80% of students believed that they could eliminate their prejudices against gay persons ( $N=148$ , 79.5%) by caring for HIV disease patients, 26 (14.0%) students said they could not. One hundred and fifty students (80.6%) believed that they would become professionals who provided equal care to HIV disease patients. Eighteen students (9.7%) did not agree.

Inspection of the salient normative belief scores, subscale 5 (Table 3), indicated that 125 (67.2%) students believed that their parents would not be supportive of their caring for HIV disease patients, while 28 students (14.1%) perceived their parents would be supportive. The number of students who responded that their parents would be neutral was 32 (17.2%).

Friends ( $M=3.85$ ,  $SD=1.42$ ) and peers in their clubs ( $M=4.04$ ,  $SD=1.37$ ) were perceived as being somewhat neutral. Responses on these two items were similar. Approximately one third of the students responded that their friends ( $N=60$ , 32.3%) and peers in their clubs ( $N=73$ , 39.3%) would be supportive of their caring for HIV disease patients, but another one third of the students did not perceive that their friends ( $N=61$ , 32.8%) and peers in clubs ( $N=48$ , 25.8%) would be supportive. The rest of the students responded that their friends ( $N=61$ , 32.8%) and peers in clubs ( $N=62$ , 33.3%) would be neutral.

Table 3. Frequencies, Means, and Standard Deviations of items on the Salient Normative Beliefs Scale ( $N=186$ )

Item	Mean	SD	Disagree (1-3)	Neither (4)	Agree (5-7)
1) Parents ( $N=186$ )	2.71	1.64	67.2%	17.2%	14.1%
2) Faculty ( $N=185$ )	5.41	1.23	5.4%	15.6%	79.1%
3) Friend ( $N=182$ )	3.85	1.42	33.0%	34.4%	32.4%
4) Club ( $N=183$ )	4.04	1.37	25.9%	34.4%	39.5%
5) Classmates ( $N=184$ )	4.40	1.29	17.9%	29.7%	52.2%

Most importantly, students in this study believed that their faculty and classmates would be positive about their caring for HIV disease patients. One hundred and forty-seven (79.1%) students replied that their faculty would be supportive of their caring for the patients with HIV. Only 10 students (5.4%) responded that their faculty would not be supportive. Also, 51.6% ( $N=96$ ) of the students perceived that their classmates would be supportive. However, one third of students ( $N=55$ , 29.6%) responded that their classmates would be neutral.

#### Inferential Analysis of the Study Questions

Prior to undertaking multiple regression analysis to answer the research questions, a multiple correlation analysis was performed to determine whether multicollinearity existed among the study variables. Correlation coefficients among all variable are presented in Table 4.

As seen in Table 4, several significant positive relationships were found. For example, attitude and subjective norm were positively related to each other ( $r=.34$ ,  $P < .01$ ), and attitude and normative belief were also positively related ( $r=.20$ ,  $p < .01$ ). A positive relationship also was found between subjective norm and salient behavioral belief ( $r=.28$ ,  $p <$

.01) and between salient behavioral belief and salient normative belief( $r=.18, p<.01$ ). Although positive relationships exist between variables, the correlation coefficients were not considered high enough to produce problems in statistical analysis of the research questions. Correlation coefficients greater than .70 are considered causes of statistical and logical problems (Tabachnick & Fidell, 1996).

Table 4. Correlation Matrix of Study Variables

Intention	Attitude	Subjective Norms	Salient Behavioral Beliefs	Salient Normative Beliefs
Intention	.68*	.26*	.43*	.18*
Attitude		.34*	.55*	.20*
Subjective Norms			.28*	.36*
Salient Behavioral Beliefs				.18*
Salient Normative Beliefs				

\* $p<.01$

Research Question 1 :

Simultaneous multiple regression was performed to examine whether attitude and subjective norms were predictors of intention. Attitude and subjective norm scores served as the predictor variables while intention was the criterion or outcome variable. The two predictor variables were entered simultaneously. Inspection of the multiple correlation coefficient ( $R^2$ ) revealed that attitudes and subjective norms explained 46% of the variance in intention ( $R^2=.46, p=.001$ ). Inspection of the beta weight for each of the two predictor variables

Table 5. Multiple Regression Analysis of Attitude and Subjective norm on Intention

Variable	B	SE	B
Attitude	.95	.08	.69*
Subjective Norm	.03	.05	.03

Note, R square=.46

\* $p<.01$

revealed that only attitude is the predictor variable on intention ( $\beta=.66, p=.001$ ), while subjective norm was not ( $\beta=.03, p=.56$ ). The results of the multiple regression analysis are presented in Table 5.

Research Question 2 :

This question sought to determine whether students behavioral and normative beliefs about caring for HIV disease patients were related to their attitude and subjective norms about caring for HIV disease patients. Bivariate correlation coefficients were computed using Pearson correlations. As seen in Table 4, a significant positive relationship between attitude and salient behavioral beliefs was found ( $r=.55, p<.01$ ). A significant positive relationship between subjective norm and salient normative beliefs were also obtained ( $r=.36, p<.01$ ).

Study Question 3 :

Simultaneous multiple regression was performed to examine whether behavioral beliefs and normative beliefs were predictors of intention. Behavioral and normative beliefs scores served as the predictor variables while intention was the criterion variable. The two predictor variables were entered simultaneously.

Inspection of the multiple correlation coefficient ( $R^2$ ) reveals that behavioral and normative beliefs explained 17% of the variance in intention ( $R^2=.17, p<.01$ ). Inspection of the beta weight for each of the two predictor variables revealed that only salient behavioral beliefs ( $\beta=.38, p<.01$ ) was the predictor variable on intention. The results of the multiple regression analysis are presented in Table 6.

Table 6. Multiple Regression Analysis of Behavioral Beliefs and Normative Beliefs on Intention

Variable	B	SE	B
Salient Behavioral Beliefs	.02	.01	.38*
Salient Normative Beliefs	.01	.01	.09

Note, R square=.17

\* $p<.01$

## Discussion

### Descriptive Findings

Korean nursing students did not have positive intention to care for HIV disease patients. Rather they had neutral intention. This finding is inconsistent not only with the negative intentions of Western nursing students in 1980s (Lester & Beard, 1988 ; Wiley, Heath, & Acklin, 1988), but was also inconsistent with the positive intentions of Western nursing students in 1990s (Goldenberg & Laschinger, 1991 ; Jemmott, Jemmott III, & Cruz-Collins, 1992).

The neutral finding could indicate that students were not able to arrive at a decision about caring. Students in this study seemed not to have enough information about caring for HIV disease patients to use to make their intentions. Almost all students of this study had not known or taken care of the patients with HIV disease. Furthermore formal information about caring for HIV disease patients had not been presented in Korean nursing curriculum at the time of this study. As a result, students may not have perceived that caring for HIV disease patients was their problem. Rather, they might have perceived the question as being hypothetical.

The neutral intention was perhaps due to conflict students may experience regarding the question. The conflict could be attributed to cognitive dissonance resulting from the desire to perform a socially acceptable behavior that conflicts with personal beliefs. Even though students had negative intentions to care for HIV disease patients, the students could not reply they would not definitely care for HIV disease patients because they knew it was not a socially desirable response to the question as professional nurses – to – be.

### Relationship Between Attitude, Subjective Norm and Intention

Given the cultural differences between American and Korean students, it is logical that one could hypothesize that subjective norm could be the more

powerful predictor of intention. Furthermore, whether attitude or subjective norm are the most important predictor of behavioral intentions depends on the particular behavior and the particular population that is studied (Jemmott & Jemmott III, 1991).

It has been a traditional value in Korean culture to submit to the elder or to others rather than to confront them (Oh Jae-Chul, 1981). The influences of significant others has been more powerful than personal preference in making decisions. In fact, there is empirical support for this expectation. A study of Myeong and Crawley (1993) was the case. The investigators studied 665 Korean high-school students to determine their science-track choice. The investigator found that a subjective norm (e. g., influences of parents) of the students was a more powerful predictor variable of student choice than attitudes toward the science-track.

The present study findings, however, did not support initial expectations nor the findings of Myeong and Crawley (1993). This study found that attitude and subjective norm of the Korean nursing students explained the intention to care for HIV disease patients. The students who had a more positive attitude toward caring for HIV disease patients and those who perceived more support from their significant others for caring the HIV disease patients reported more positive intention to care for HIV disease patients supporting the applicability of the theory to explain Korean nursing students intentions to care for HIV disease patients. However, attitude was the only predictor variable of the intention while the subjective norm was not. There are several possible reasons for this finding.

From a cultural perspective, Korean nursing students today may be less submissive than prior generations. The Korean younger generation (the so called X-generation), like the sample of this study in 1990s, has been characterized as being self-centered, opinionated, or individualized (Kim Kyung-Hoon, 1995). Cultural differences seem diminished among the students surveyed. Conse-

quently, parental influence may be lessened or non-existent.

The finding that attitude is the major predictor of intention is similar to studies in Western societies (Lierman, Young, Kasprzyk, & Benoiel, 1990; Jemmott & Jemmott III, 1991; Chan & Fishbein, 1993). When women's intention to practice breast-self examination was investigated, Lierman et al. (1990) found that women who had more positive attitude toward breast-self examination and those who perceived strong social support from significant others showed more positive intention to practice breast-self examination. Only attitude was found as the predictor of breast self-examination in that study. Jemmott and Jemmott III (1991) in their study of black women's intention to use condoms during sexual intercourse, also found that black women's attitude and perceived subjective norms (social support) explained intention. Again, attitude was the only predictor variable. Chan and Fishbein (1993) also found similar results when studying college women's intentions to tell their partners to use condoms. The college women's intentions were also explained by their attitudes and perceived social support. Again attitude was the major predictor variable of intention.

Cultural differences may be diminished in the 21st century when increased computer-networks or various multi-media make it easy for various cultures to mingle and for individual to select values from them (Kim Kyung-Hoon, 1995). This issue needs to be further investigated.

Another reason for this finding could be a developmental characteristic of young adults. In the young adult stage of the nursing students surveyed, she develops her identity and prepares for a life independent or autonomous from their parents (Erikson, 1963). Young adults develop their own families and consider spouses and children to be the most important significant others.

Studies have indicated other people's expectations were an important determinant in the respondents' intentions to care for patients with HIV disease

especially when those significant others were spouses or children (Blumenfield et al., 1978; Scherer, Haughey, & Wu, 1989; Reed et al., 1985). Blumenfield et al. (1978) found that those who refused care did so because of concern over infection to themselves or to their children. According to the finding of Reed et al. (1985), of those who refused to work with the patients with HIV disease, half claimed it was because their spouses were anxious. Scherer, Haughey and Wu (1989) also found that those who had no children reported less fear of caring for HIV disease patients than those who had children.

The nursing students surveyed are young adults who are independent of their parents but who have not yet developed their own families. Most of the students were not married and had no children. They, themselves, may be the most important determinants in their intentions at this time. The findings could be different if samples in different age groups would be used. The use of samples in different developmental stages may be recommended for further studies.

A third possible reason for the gap between theory and these study findings may be a lack of knowledge by the students about what others actually think. This study found that 99% of 186 students surveyed replied they have never provided care to HIV disease patients or met people who were HIV positive. Under this circumstance, caring for HIV disease patients may not be an issue to discuss. Thus, when students were asked whether or not their significant others are supportive, the students may answer the question by guessing or using their imagination rather than by using their knowledge about the significant others' actual responses. If students know actual attitudes of their significant others, their responses may be different. Adding an "I do not know" indicator to the 7-point, Likert-scale of subscale 3 (subjective norm) is recommended for further study when considering this issue.



#### Relationship Between Attitude and Salient Behavioral Beliefs and Between Subjective norm and Salient Normative Beliefs

The relationship between attitude and salient behavioral beliefs and the relationships between subjective norm and salient normative beliefs were investigated to examine whether the identified beliefs were salient for the students. Positive relationships between attitude and salient behavioral beliefs and between subjective norm and salient normative beliefs were found supporting that the beliefs identified in this study were salient ones for the students.

The theory proposed that only salient beliefs influence intention. The positive relationship between beliefs and attitude or subjective norm should be obtained prior to further investigation. The failure of justification of the positive relationship indicated that the study finding of relationship between beliefs and intention is not no longer theory guided.

Salient beliefs of a behavior are different among groups surveyed (Ajzen & Fishbein, 1980). Therefore, identification of salient beliefs for each sample of each study is recommended.

#### Relationship Between Salient Behavioral Beliefs and Salient Normative Beliefs and Intention

Finally, the role of beliefs in explaining and predicting students intentions to care for HIV disease patients was examined. The variable of salient normative beliefs was thought to be a more powerful predictor of intention than the salient behavioral beliefs, given the culture context of the study.

The salient behavioral beliefs and salient normative beliefs of Korean nursing students were the factors which explained their intentions to care for HIV disease patients. This study showed when students had greater belief in the likelihood of the outcomes identified and more positively evaluated them, they had more positive intentions. At the same time, students who had stronger belief that significant others were supportive and had more motivation to comply with the others indicated more

positive intentions to care for HIV disease patients. These findings support the use of theory of reasoned action in explaining the intentions of Korean nursing students to care for HIV disease patients.

However, this finding should be interpreted cautiously because the reliability of the instrument (HIV-BASIS) was limited. As previously mentioned, the reliability of HIV-BASIS which measured sum-of-product variables like salient behavioral beliefs or salient normative beliefs was limited in terms of internal consistency. Therefore, type II error could be possible. Rather, evaluation of test-retest reliability is recommended.

When further analysis was performed, finding inconsistent with the expectation were found. Salient normative beliefs were not a predictor variable of intention. Only salient behavioral beliefs were a significant predictor. This finding is similar to that of Laschinger and Goldenberg (1993). When Canadian nurses intentions to care for HIV disease patients were studied, researchers found indirect attitude (salient behavioral beliefs) and indirect subjective norm (salient normative beliefs) explained the nurses intentions to care for HIV disease patients. This study found the indirect subjective norm was not a predictor variable.

The inconsistency between theory and study results may be explained by the lack of variance of subscale 5 (salient normative beliefs). When the sub-structures of subscale 5 (expectation-of-outcome and motivation-to-comply) were examined, over one-third of the students surveyed replied that their friends, peers in club, and classmates were neither positive nor negative in supporting their caring for HIV disease patients. It seemed that they did not know the actual responses of these people (actually some students wrote memos in the questionnaire that they did not know). As previously mentioned, caring for HIV disease patients has not been an issue in Korean society. Students may not have discussed this issue with the identified significant others.

Another factor in the lack of variance of subscale

5 scores was the limited variance of the sub-structure of motivation-to-comply scale scores. The bias of central tendency in the scale may be a factor. Examination of the motivation-to-comply scale scores found that each mean score of the 5 individual items in the sub-structure was very similar and centered. No difference among the 5 mean scores was found.

Careless responses by the student may be a contributor to the findings. Students may have become bored when they read the same questions repeatedly. The same format for the 5 items may have led to careless or indeliberate answers. Different wording or various formats for the 5 questions may be desired when developing the measure of subscale 5.

Social desirability bias may also be a factor of the similar responses to all 5 items. The students may not have wanted to indicate with whom they do or do not comply. They may be cautious in exposing private information about personal preference. Reassurance of confidentiality of the study results may be desired.

#### Implication

Given the limited number of patients presently diagnosed with HIV disease in Korea, an initial strategy involves the inclusion of accurate, formal information in the nursing curriculum. Formal information decreases false beliefs or changes negative beliefs among students and increases students intentions (Jemmott et al., 1992; Goldenberg & Laschinger, 1991; Lawrence & Lawrence, 1988; Van Servellen et al., 1988).

Realistic appraisal of the risk of exposure to HIV when universal blood and body fluid precautions are followed is recommended (Wilely, Heath, & Acklin, 1988). Careful and consistent application of self-protection techniques from exposure to HIV needs to be taught. Data from scientific approaches toward caring for HIV disease patients in health care settings are also required.

Lectures followed by discussion has been

recommended in AIDS education (Oermann & Gignac, 1991). Lecture alone may be effective in acquiring knowledge about HIV infection, but students also need discussion about making judgments and decisions relative to caring for HIV disease patients.

Once students have been given the formal information, clinical experiences need to be sought. Experience with HIV disease patients decreases students fear and results in more positive attitudes toward the patients (Scherer, Haughey, & Wu, 1989).

Students also need to examine their attitude, beliefs, and values, and to develop a value system supportive of HIV disease patients to increase the positive attitude (Oermann & Gignac, 1991). Hypothetical situations involving value, moral, or ethical conflicts related to HIV disease patients are recommended as useful for teaching and provide a strategy for students to examine their own attitudes (Oermann & Gignac, 1991). Opportunities for students to ask questions and to sort out their values and feelings regarding HIV disease patients through interaction with faculty and peers or through individual counseling are also recommended (Lester & Beard, 1988).

Students need to know what others think. Even though significant others were not determinants of students intentions, theoretically social support is relevant. For students, social support may be received from faculty. Faculty were identified by the students as one of their significant others in this study. This is important because students frequently make their decisions referring to faculty opinions.

Demonstration of supportive behavior of faculty members could be helpful. The supportive behaviors can be seen in lectures, personal discussions, or in everyday school life. In addition, role modeling by faculty members could be also effective. Nurses who practice caring for HIV disease patients may be more effective than nurses who are supportive but do not practice the care.

This study tested the applicability of the theory of reasoned action using the intention of caring for HIV disease patients. The study found that the theory is useful in explaining the intentions to care for HIV disease patients, but prediction of the intentions with the theory components was limited. These findings suggest that more studies are required to test this theory in terms of predicting the intentions to care for HIV disease patients.

This study also tested whether the theory of reasoned action was culturally universal or culturally unique. This study did not support that the theory of reasoned action is fully applicable to different cultures. The theory explained Korean nursing students intentions, but predicted the intentions partially. Several possible reasons for the results were discussed previously, especially that the subjective norm was not the predictor variable of the intention to care for HIV disease patients. More studies are recommended to examine whether the findings of this study resulted from cultural differences or from type II error.

### References

- Ajzen, I., & Fishbein, M.(1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ : Prentice –Hall.
- American Nurses Association.(1994). Compendium of HIV/AIDS position, policies and documents. Washington, DC : Author.
- Alexander, R., & Fitzpatrick, J.(1991). Variables influencing nurses attitudes toward AIDS and HIV disease patients. AIDS Patient Care, 5, 315–320.
- Blumenfield, M., Smith, P. J., Milazzo, J., Serpian, S., & Worme, G. P.(1987). Survey of attitudes of nurses working with HIV disease patients. General Hospital Psychiatry, 9, 58–63.
- Borg, W. R., & Gaul, M., D.(1989). Educational Research : An Introduction(5th, ed.). White Plains, NY : Longman, Inc.
- Brenner, E. B., & Kauffman, J.(1993). Reluctance of internists and medical nurses to perform mouth-to-mouth resuscitation. ARCH International Medicine, 153(9), 1763–1769.
- Campbell, S., Maki, M., Willenbring, K., & Henry, K.(1991). AIDS-related knowledge, attitudes, and behaviors among 629 registered nurses at a Minnesota hospital : a descriptive study. Journal of the Association of Nurses in AIDS Care, 2(1), 15–23.
- Chan, K. D., & Fishbein, M.(1993). Determinants of college womens intentions to tell their partners to use condoms. Journal of Applied Social Psychology. 23(18), 1455–1470.
- Development of an HIV disease patients rights association.(1993, March 20). The Chosun Daily News Paper.
- Erickson, E. H.(1968). Identity, youth, and crisis. New York, NY : W. W. Norton.
- Fishbein, M., & Ajzen, I.(1975). Beliefs, attitudes, intentions, and behavior : An introduction to theory and research. Reading, MA : Addison–Wesley.
- Goldenberg, D., & Laschinger, H.(1991). Attitudes and normative beliefs of nursing students as predictors of intended care behaviors with HIV disease patients : A test of the Ajzen–Fishbein Theory of Reasoned Action. Journal of Nursing Education, 30, 119–121.
- Jemmott, L. S., Jemmott III, J. B., & Cruz–Collins, M.(1992). Predicting HIV disease patients care intentions among nursing students. Nursing Research, 41(3), 172–177.
- Jemmott III, J. B., Freleicher, J., & Jemmott L. S. (1992). Perceived risk of intention and attitudes toward risk groups : Determinants of nurses behavioral intentions regarding HIV disease patients. Research in Nursing & Health, 15, 295–301.
- Laschinger, K. S., & Goldenberg, D.(1993). Attitude of practicing nurses as predictors of intended care behavior with persons who are HIV positive : Testing the Azjen–Fishbein Theory of Reasoned Action. Research in Nurs-

ing & Health, 16, 441-450.

Lester, L. M., & Beard, B. J.(1988). Nursing students attitudes toward AIDS. Journal of Nursing Education, 27, 399-404.

Lierman, L. M., & Young, H. M., Kasparzyk, D., & Benoliel, J. Q.(1990). Predicting breast self-examination using the Theory of Reasoned Action. Nursing Research, 39(2), 97-101.

Mann, M. J., Tarantola, M. D., & Netter, W. T. (ed.).(1992). AIDS in the world. Cambridge, Mass : Harvard University Press.

Mueller, W. C., Cerny, E. J., Amundson, M. J., & Waldron, A. J.(1992). Nursing faculty and students attitudes regarding HIV. Journal of Nursing Education, 31(6), 273-277.

Myeong, J. O., & Crawley, E. F.(1993). Predicting and understanding Korean high school students science-track choice : Testing the theory of reasoned action by structural equation modeling. Journal of Research in Science Teaching, 304, 381-400.

Reed, P., Wise, T. N., & Mann, L. S.(1984). Nurses attitudes regarding acquired Immunodeficiency syndrome(AIDS). Nursing Forum, 21, 153-156.

Scherer, Y. K., Haughey, B. P., & Wu, Y. B. (1989). What are nurses concerns? Clinical Nurse Specialist, 3(1), 48-54.

Van Servellen, G. M., Lewis, C. E., & Leake, B. (1998). Nurses responses to the AIDS crisis : Implications for continuing education program. Journal of Continuing Education in Nursing, 19, 4-8.

Wiely, K., Heath, L., & Acklin, M.(1988). Care of HIV disease patients : Students attitudes. Nursing Outlook, 36, 244-245.

Wiely, K., Heath, L., Acklin, M., Earl, A., Barnard, B.(1990). Care of HIV infected patients : Nurses concerns, opinions, and precautions. Applied Nursing Research, 3(1), 27-33.

Werner, L., & Campbell, D. T.(1970). Translating, working through interpreters and the problem of decentering. In R. Naroll & R. Cohen(Eds.).

American handbook of methods in cultural anthropology(pp. 398-420). Garden City, NY : Natural History Press.

- 국문초록 -

주요개념 : 간호대학 학생, HIV 간호의도, 인식, 태도

### Reasoned Action Theory를 적용한 한국간호대학생들의 HIV 대상자 간호의도 예측을 위한 인식, 태도 연구

유 혜 라\*

본 연구는 한국의 간호학생들이 HIV-Disease 대상자를 간호하려는 의도정도와 이를 설명하고 나아가 예견할 수 있는 요인으로 학생들의 인식과 태도를 조사하였다. TRA가 본 연구의 개념틀로 사용되었다. 서울에 소개하고 있는 5개의 4년제 간호대학을 무작위로 추출하였으며 4학년 학생들 186명을 연구의 대상으로 하였다. 한국어로 번역된 Ajzen과 Fishbein(1980)의 도구를 이용한 질문지법을 연구의 방법으로 사용하였다. 다중회귀분석과 상관관계분석이 자료의 분석에 이용되었다. 한국 간호대학 학생들의 HIV-Disease 대상자 간호 의도는 중립적인 것으로 조사되었다. 학생들의 의도는 학생들이 가지고 있는 HIV-Disease 대상자 간호에 관한 태도와 또한 HIV-Disease 대상자 간호로 인한 결과에 대한 인식으로 예견되었다. HIV-Disease 대상자를 간호하는 것이 학생들에게 긍정적인 결과를 줄 것이라는 인식은 학생들의 간호의도를 예견하고 있다. 그러나 TRA와는 달리 주위사람들이 자신이 HIV-Disease 대상자를 간호하는데 관한 의견은 학생들의 의도를 예견하지 못하였다. 학생들은 자신의 부모, 형제 또는 애인의 경우 자신이 HIV-Disease 대상자를 간호하지 않기를 바란다고 인식하고 있는 반면, 자신의 학교 교수, 성직자, 그리고 친구들은 HIV-Disease 대상자를 간호하는데 부정적이지는 않다고 인식하고 있다. 특히 같은 간호학을 전공하는 학교 친구들이 보여주는 HIV-Disease 대상자를 간호해야 한다는 인식은 타 학생들의 의도를 예견하는 것으로 조사되었다. 본 연구

\*연세대학교 간호대학성인간호학 교실 강사

결과에 의하면 학생들의 HIV-Disease 대상자 간호 의도는 높지 않은 것으로 조사되었으며 특히 학생들의 간호의도에 학교의 교수들이 별 영향을 주고 있지 않은 것으로 나타났다. 이 결과에 의하면 HIV 질환과 HIV-

Disease 대상자 간호 교육의 목표는 단순한 지식의 습득 뿐만 아니라 학생들이 보다 긍정적인 태도를 가질 수 있고, 긍정적인 결과를 인식할 수 있도록 설정되어야 한다고 제안하고 있다.