

## CHAPTER II

### REVIEW OF RELATED LITERATURE

For this thesis entitled " The intentions of nurses to take care of HIV-infected patients " there is no direct theoretical frame basis. The researcher has applied the framework from related theories and other pieces of research. There are a number of studies about the impact of AIDS on health professionals. Each of them was different in the purpose, method and application. The following is the review of related literature.

#### AIDS : NATURAL HISTORY

##### The Origin

AIDS was first recognized in 1981. The etiology or causative agent of AIDS is a retrovirus, the Human Immunodeficiency Virus (HIV). The HIV virus attracts the Helper T-cells of the immune system. Helper T-cells identify the "enemy" and stimulate the production of other cells to fight infections. The ability of HIV to invade and kill these cells disables the entire immune response. The AIDS patient is then open to be attacked from opportunistic infections. In other words, AIDS is not the direct cause of death. It weakens the immune system which allows other diseases to cause harm.

The origins of Human Immune Viruses are currently not known. The rapid accumulation of nucleotide sequence information from immunodeficiency virus originates in simian and human species. The problem still to be answered is what will be the long-range biologic consequences of

high mutational rate of HIV viruses that continue to spread epidemiologically in many populations throughout the world (DeVita, Hellman, and Rosenberg, 1988; Sheridan and Radmacher, 1992).

### **The Transmission of AIDS**

HIV is found in most body fluid, including blood, semen, saliva, urine, tear, breast milk, and vaginal/cervical secretion. Nevertheless, AIDS is not an easy disease to contract. The amount of HIV virus found in clear body fluid is very small. The virus is also fragile outside the human body and can easily be killed with soap, alcohol, peroxide or household bleach. Blood and semen appear to be the most effective vehicles to transmit HIV virus. Transmission is much more likely for individual with a depressed immune system and for those who have been repeatedly exposed to a high level of the virus.

High Risk Behavior: according to the Control, any activity that directly exposes a person to the blood, semen, or vaginal fluid of HIV-infected person should be considered. Nowadays, in consequence of the wide spread of HIV infection, we need to focus attention on the risk behavior rather than the risk groups.

### **Signs and Symptoms**

WHO (1988) has developed a definition requiring that two of the following major and one of the minor criteria be present in order to mark the diagnosis of AIDS (Widy-Wirski et al, 1988).

#### ***The major criteria are:***

- Fever lasting longer than 1 month
- Weight loss greater than 10 % of body weight

- Chronic diarrhea lasting more than 1 month

**The minor criteria are:**

- General pruritic dermatitis
- Herpes zoster
- Oropharyngeal candidiasis
- Chronic or aggressive ulcerated herpes simplex
- General lymphadenopathy

Aggressive or disseminated Kaposi's sarcoma or Cryptococcal alone mark the diagnosis of AIDS (Hopp and Roger, 1989).

**Diseases Related to HIV Infection**

HIV infection itself should be viewed as a disease, a continuum of conditions associated with immune dysfunction. All symptoms (in Figure 2.1 below) are part of the same disease.

The classification of HIV infection reflects the progression of infection from the appearance of initial signs and symptoms through a long asymptomatic period with or without the develop of generalized lymphadenopathy, to the development of AIDS, the final and symptomatic stage of HIV infection.

**Figure 2.1 The Clinical Classification of HIV Infection**

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**Type of HIV Infection**

**Group I** Primary HIV infection: serotesting for HIV positive or negative antibody seroconversion is required as evidence of initial infection. After acute syndrome resolves, all group I patients are reclassified to another group.

Figure 2.1 (continued)

**Group II** A symptomatic infection

**Group III** Generalized lymphadenopathy

**Group IV** AIDS

**Subgroup A** Constitutional diseases: defined as one or more of the following:-

- Fever persisting more than one month.
- Involuntary weight loss greater than 10 % of base line
- Diarrhea persisting more than one month.

**Subgroup B** Neurologic diseases: defined as one or more of the following:-

- Dementia
- Myelopathy
- Peripheral neuropathy

**Subgroup C** Secondary infectious diseases: e.g.

- Pneumocystic carinii pneumonia
- Cytomegalovirus infection
- Herpes simplex
- Mycobacterium avium-intracellulare
- Multidermatomal Herpes zoster
- Oral hairy leukoplakia
- Oral thrush

etc.

**Subgroup D** Secondary Cancers: for example,

- Kaposi's sarcoma
- Non-Hodgkin's lymphoma
- Primary lymphoma of the brain

**Subgroup E** Other: Lymphoid intestinal pneumonitis

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From : Revision of the CDC Surveillance for AIDS. MMWR 36: 1s; 1987

## IMPACTS OF AIDS

### **The Impact of AIDS on Health Personnel**

AIDS has many social and psychological consequences for health professionals due to several reasons. Firstly, the stress associated with AIDS work is an occupational and s or mucous membrane (Reungveerayut of health professionals to AIDS has consequences for the health care given to HIV-infected people. Thirdly, the psychosocial implication of AIDS work has implications for the recruitment, training and retention of HIV care-givers (Eakin and Taylor, 1990). The AIDS epidemic has placed a great variety of psychosocial burdens on health professionals, such as the following:-

#### ***Fear of Contagion***

The fear created by an infectious, fatal disease presents another, very different ethical dilemma for all health-care providers. Fear also leads a person to make strong and persistent responses to avoid the fear-arousing situation. The level of fear appeal markedly affects attitude and behavioral intention (Oskamp, 1991). Even though the epidemiological risk for health professionals is low, fear and anxiety about accidental occupational exposure to HIV infection are discussed in the literature more than any other single issue (Gerbert et al, 1989). For instance, one study stated that the risk of HIV infection after exposure to the blood of a patient with HIV infection is 0.5% and a possible seroconversion is most likely to occur within 6-12 weeks (Marcus, 1988). The persistence of fear may reflect the professionals' lack of confidence in available statistical data, lack of confidence in effectiveness of prescribed infection control procedure, or lack of confidence in medical knowledge and available means of self-protection (Eakin and Taylor, 1990). But the most important reason will be

perception of the risk more in terms of personal consequences than in term of population-based probability.

### ***Social Stigmatization***

Working with AIDS patients can be seen to have negative social consequences and health professionals are perceived to be tarnished by the social stigma of AIDS. One study showed that some doctors and dentists believe that having AIDS patients in a practice could upset other patients (Gerbert, 1988; Schentz, 1989). Furthermore, attitude stigmas toward AIDS patients by nurses could interfere with patient interaction and care. For instance, 32.3 % of 166 respondents emphasized that AIDS patients were judged more harshly and nurses were less willing to have contact with them [Kelly et al, 1988].

### ***Sense of Professional Inadequacy***

A feeling of professional ineffectiveness and uncertainty also contributes to the distress experienced in AIDS work by health professionals. They are oriented toward cure and healing. According to AIDS, many health professionals feel discouraged by the lack of a cure and the perception that there are few therapeutic alternatives for managing the disease.

### **The Impact of AIDS on Health-care Manpower**

AIDS has an impact on the shortage of health-care manpower, especially hospital nurses. Nurses have assumed increasingly more responsibility for care of AIDS patients. In addition, nurses have been shown to be patient educators in such areas as proper taking of medication, coping with disabilities, and handling the activities of daily life. One of a consequences of the psychosocial impact of AIDS on health professionals is burnout, for example, one study among nurses hypothesized that nurses working in the area of AIDS would suffer more



intensity of burnout than nurses working in the area of oncology (Bennett, Michie and Kippax, 1991).

### **Some AIDS Research on Health Personnel**

There have been a number of reports of health professionals expressing anxiety, fear, negative attitudes and their needs in relation to caring for patients with HIV infection. In 1988, one quarter of 274 health-care workers in a hospital in Bangkok were uninformed about HIV transmission via body fluids and about recommended disinfection procedures; more than half feared contracting the disease from patients and preferred to avoid them (Prapant Phanuphak et al., 1988). In the study of Suratep Noppornpant (1991), it is reported that 82.5% of 289 health-care personnel in Yala Hospital had fear of AIDS; 82.9 % were not willing to work with AIDS patients. Chaiwat Panjapongse et al. (1989) found in 221 medical personnel in six provinces that many of them still had inadequate knowledge about AIDS; they felt they were a risk group to contact AIDS because of their routine responsibility; they did not feel sympathy toward AIDS patients who contracted the disease through sexual activity and drug addiction; the majority agreed with having an isolation area for AIDS patients. In 1990, 84.19 % of 658 health personnel in Ramathibodi Hospital had moderately positive attitudes towards the HIV-infected patients; many of them had inadequate knowledge; 52.22 % and 37.96 % had fear of AIDS transmission through the blood or serum of an HIV-infected person, and through needle-stick injuries respectively (Prapai B. et al., 1992).

Most research which explored the intentions of nurses to take care of HIV-infected or AIDS patients presented that willingness to care had a significant

relationship with homophobic attitudes, that is, nurses who expressed a more negative attitude toward homosexuals were more intent on avoiding caring for patients with AIDS or HIV infection (Barrick, 1988; Currey, Johnson, and Ogden, 1990; Jemmott III, Freleicher, and Jemmott, 1992). Some studies also indicated that nurses who had high knowledge scores about AIDS were more willing to provide care for AIDS patients (Wiley, Heath, and Acklin, 1988; Gignac and Oermann, 1991; Jemmott et al., 1992). On the other hand, one study found that nurses considered most knowledgeable about infectious disease, with most direct AIDS patient care experience and higher levels of education, were less willing to care for an AIDS patient (Kemppainen et al., 1992).

#### **THEORY RELATED "BEHAVIORAL INTENTION"**

##### **Ajzen-Fishbein Theory of Reasoned Action**

Ajzen and Fishbein (1980, 1975) proposed a theory of reasoned action to explain how individuals make decisions about carrying out certain behavior. Intentions are key determinants of subsequent behavior. In the theory, volitional behavior predicted from a person's intention is a function of two factors: first, attitude toward performing the behavior in question, and second, subjective norms or a person's perceptions of the expectations of others with regard to performing the behavior.

Attitude is a composite variable that includes a person's beliefs about the consequences of performing the behavior, weighted by the person's evaluation of the expected outcome of performing that behavior. This relationship is expressed in the form:

$$\text{Attitude} = \text{Behavioral belief} \times \text{Value of expected outcome}$$



Subjective norms are a function of the expectations of others, weighted by a person's motivation to comply with these expectations as represented in the equation:

$$\text{Subjective norm} = \text{Expectation of others} \times \text{Motivation to comply}$$

The overall model can be summarized in the equation:

$$\text{Behavioral Intention} = \text{Attitude} + \text{Subjective Norm}$$

That is, behavioral intentions are derived from the combination of personal and interpersonal factors: personal belief and perceived beliefs of others. When individuals believe behavior will result in valued consequences and that people important to them consider the behavior to be worthwhile, they are likely to execute that behavior. It can be summarized as shown in figure 2.2

### "A THEORY OF REASONED ACTION"

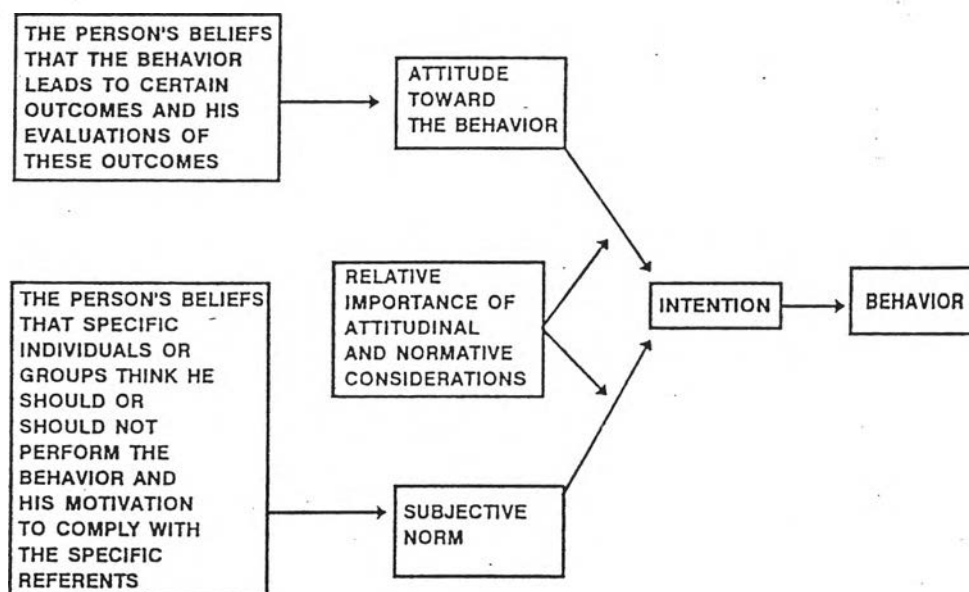


Figure 2.2 Factors Determining Person's Behavior

For example, Goldenberg and Laschinger (1991) established that the Ajzen and Fishbein theory has competence to explain individuals' intentions to engage in certain behavior as determined by two components: attitudes toward the behavior and subjective norms. They also found that students' attitudes and subjective norms were significant predictors of intention to care for HIV-infected patients in their clinical experience.

#### **FACTORS ASSOCIATE WITH THE INTENTIONS TO CARE FOR HIV-INFECTED PATIENTS AND RELATED RESEARCH**

There are a large number of reports from many countries indicating that most health-care workers have a negative view on their job about caring for HIV patients. As a result, their performance tends to be ineffective. A number of studies related causal factors to intention such as psychosocial impacts, work motivation, ability, policy of prevention.

##### **Work Motivation**

In an organization, human resources are the most important factor to indicate organizational success. Motivation is a major component in answering why people act as they do and why they obtain the cooperation of others. The concept of motivation induces one to understand human behavior. This concept is both simple and complex. It is simple because behavior of individuals is goal-directed and either externally or internally induced. It is complex because the mechanism that induces behavior consists of the individuals' needs, wants and desires, and these are shaped, affected and satisfied in different ways (Rakich, Longest and Darr, 1985). There are many human motivation theories which explain what behavior is within individual or the environment, how it is initiated and what goal is.

Human motivation in job performance is reflected in job satisfaction, because job satisfaction is a set of favorable or unfavorable feelings with which people view their work. Motivation affects how much and how well a person will practice a task. For the health care workers group, they are ambitious, hardworking, and aspiring to a perfection in their performance that will result in a successful outcome [Lewis, 1988]. They have high performance expectations which some find difficult to reach. The inevitable loss of self-esteem causes depression, lack of job satisfaction, and burnout.

### **Fear of AIDS**

One of the most important factors is fear. Fear of AIDS in the workplace has significant consequences. A state of mind of health professionals constantly worrying about AIDS may influence the quality of their enthusiasm for their jobs. For instance, 74 % of California dentists (Gerbert, 1987) and 42 % of British dentists (Searle, 1987) said they would rather refer people with AIDS to other practitioners. In Treiber's study, the researchers compared the reactions of physicians and nurses in caring for patients with AIDS and those without AIDS. It emerged that health professionals had more anxiety, more interference in non-work activity, and a more negative perception of the patients' behavior whenever they cared for AIDS patients than when they cared for the other group (Treiber et al, 1987). Fear has also led health professionals to call for patients' blood testing. Some health professionals have considered another career so the burnout process might be accelerated (Gerbert, Maguire, Badner, Altman, and Stone, 1989).

### Ability

Ability is a personal quality of being able to do something. This quality depends upon amount of knowledge, experience, skill and motivating or enabling factors such as workplace policy, facility, and administration. For instance, a study of 272 professional nurses in North-eastern Thailand showed that attitudes toward AIDS patient care, perception about AIDS, and facility in service [eg. medical instruments, medical supplies, etc.] correlated with standard infection control for AIDS precaution through nursing intervention (Kittiya Techapiroj, 1990). Another study reported that 62 % of health-care workers in health centers in Ratchburi province were very knowledgeable about AIDS but there were shortages of money and hospital supplies for the prevention of nosocomial transmission [Rowdbaumror S., 1991].

### Others

Experience in servicing HIV-infected patients: For example, the study of Somjint Pethpansri (1989) found that experience in servicing can help nurses to make decision and plan nursing care easily.

Experience of occupational accident: One study showed that during 2249 cases of surgery, 84 health-care worker were exposed to sharp injuries, gloves leakage, and patients blood or mucous membrane (Reungveerayut R., 1991). This working experience may cause health professionals to be more reluctant to care for patients when there is uncertainty about HIV infection.

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