

## 行政院國家科學委員會補助專題研究計畫成果報告

計畫名稱：探討影響醫護人員投入 HIV/AIDS 照顧之因素：醫師、護理人員、病患及醫護學生的整合性觀點 (II)

The factors affect the involvement of physicians and nurses in HIV/AIDS care:  
An integrated perspective of physicians, nurses, patients and medical and nursing students (II)

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## 一 中文摘要

臺灣地區急速增加的 HIV 感染者及後天免疫缺乏症候群 (AIDS) 病患意味著醫療人員必需有足夠的個人及專業準備度以因應此重要之健康課題，台大醫院為因應 HIV/AIDS 病患的醫療需求而於民國 83 年 6 月設立綜合病房，內含 9 床 HIV/AIDS 病床，以提供 HIV/AIDS 患者及家屬更專業化之醫療服務，此病房的設立亦表示正式在內科住院醫師之臨床實務訓練中加入 HIV/AIDS 之訓練，本研究以知識、態度、及照顧意願作為評價此訓練之指標，並由二方面進行比較，其一是住院醫師於綜合病房訓練前、後其 HIV/AIDS 的知識、態度、及照顧意願的差異，再者並比較曾及未曾在綜合病房接受訓練的住院醫師其 HIV/AIDS 的知識、態度、及照顧意願的差異。

本研究結果此訓練計畫有助於提高正確的知識、正向之特定性態度及照顧意願，未來可將此模式推廣於其他專科之臨床醫學訓練。

## 二 英文摘要

**Key words:** human immunodeficiency virus infection, internal medicine resident.

The increasing HIV/AIDS cases in Taiwan imply that health care professionals will face demands to work with people with HIV/AIDS. Health care professionals need to prepare themselves in personal and professional level in order to address this health care trend. In responding to this trend, an integrated unit, which has 9-bed designated to HIV/AIDS patients, was established in June 1994 at National Taiwan University Hospital with the purpose of

providing high quality care to people with HIV/AIDS and their family members. A one-month clinical rotation at the AIDS inpatient unit has therefore been formally added into the clinical training of internal medicine residents. Internal medicine residents are in the front lines of caring for HIV-infected patients than those of other specialties. It is crucial to understand these residents' HIV-related perceptions.

The purpose of this study was to investigate internal medicine residents' HIV-related knowledge and their attitudes towards caring for HIV-infected patients, and their care-providing intention. Specifically, the investigation was done by two comparisons. First, pre- and post-training test scores of residents who had trained in the AIDS unit, experimental group, were compared for their differences. Secondly, the test scores of residents who had and had not trained in the unit, control group, were compared for their differences.

Results showed that the knowledge, specific attitudes, and intention of the experimental group significantly increased after the one-month clinical training in the AIDS unit. Similar clinical training can be implemented in other medical specialties since the training had showed effectiveness in increasing residents' knowledge, specific attitudes, and intention after the one-month clinical training in the AIDS unit.

## 三 計畫緣由與目的

### Introduction

The increasing numbers of patients with Human Immunodeficiency Virus (HIV) and

Acquired Immunodeficiency Syndrome (AIDS) in Taiwan imply that healthcare professionals will face demands to work with HIV-infected patients and professionals need to prepare themselves in personal and professional level in order to address this health care trend. Study has shown that AIDS has already become part of mainstream primary care practice in high prevalence area of the United States that a majority of physicians had been involved in the care of HIV-infected patients. Internal medicine residents are more likely to have HIV-infected patients in their practice and are usually in the front lines to attend the healthcare needs of HIV-infection patients. Therefore, it is important to understand residents' HIV-related knowledge, attitudes toward and intention to care for patients that are crucial to the quality of patient care. Yet, no available study has documented about related information of residents who have received their medical education and clinical training in the era of HIV/AIDS in Taiwan. The literature of healthcare professionals' HIV/AIDS-related knowledge, attitudes, and intention is primarily in the context of Western health care. Studies have demonstrated stigmatization and negative attitudes towards HIV-infected patients among both physicians and nurses. Additionally, the presence of fear of contagion, misinterpretation of contagion risk, and discomfort in working with the terminally ill and gay population have been documented. Healthcare professionals' showed wide range of willingness to care for HIV-infected patients. However, studies showed inconclusive results of the effects of

HIV/AIDS knowledge levels upon attitudes towards and intention to care for HIV-infected patients. For example, a number of researchers found that more knowledgeable healthcare professionals have been shown to regard HIV-infected patients more positively and be more willing to treat them. However, no relationship was found between knowledge of, and attitudes towards patients in studies of medical students and nurses. Considerable caution is warranted in generalizing results from these studies to the countries where AIDS is perceived differently. The early strategy of AIDS public education and AIDS prevention in Taiwan was fear-based which presented biased information that has engendered fear and misconceptions of the disease in the general public and has created social stigma around HIV/AIDS. It is important to recognize that the cultural value and public discourse may profoundly affect healthcare professionals' attitudes towards HIV-infected patients. Though the recent trend in public education has shifted the emphasis to acceptance and care toward patients and reduced the fear-based strategy in public education, it may take years to actually shift both the general public's perception of AIDS.

### **Purpose**

The purpose of this study was to investigate internal medicine residents' HIV-related knowledge and their attitudes towards caring for HIV-infected patients, and their care-providing intention. Specifically, the investigation was done by two comparisons. First, pre- and post-training test scores of residents who had trained in the

AIDS unit, experimental group, were compared for their differences. Secondly, the test scores of residents who had and had not trained in the unit, control group, were compared for their differences.

#### 四 結果與討論

##### Demographic characteristics of residents

Seventy-two internal medicine residents of a university hospital in Taipei, Taiwan, participated in this study. Among these 72 residents, 36 (50%) had trained in the AIDS unit and the rest had not. Sixty-one (84.7%) were male and 11 (15.3%) were female. Of these residents, 47 (65.3%) were currently in their first year of residency, 21 (29.2%) in the second year, 3 (4.2%) in the third year, and 1 (1.4%) in the fourth year. Their mean age was 27.65 years (range, 24-35 years; standard deviation [SD]=2.16).

Three-fourth (75%) of the residents indicated that they had taken HIV/AIDS-related courses as medical students and 84.7% had received in-service training courses related to HIV/AIDS during their professional practice. There was no difference between the demographic characteristics of the experimental and control group. Residents' knowledge, attitudes, and intention

At the pre-test, the knowledge, specific attitudes, and intention were not found to differ significantly between the experiment and control group. However, the residents of the control group had significantly more positive general attitudes ( $p=.027$ ) than those in the experiment group. At the post-test, the residents of the experiment group was

significantly more knowledgeable ( $p=.015$ ) than the control group and had more positive specific attitudes ( $p=.060$ ) than those in the control group, but did not reach the significant level.

Results showed that the knowledge, specific attitudes, and intention of the experimental group significantly increased after the one-month clinical training in the AIDS unit. For the control group, residents' knowledge had significantly increased at the post-test that could be due to the natural maturation. However, there was no significant difference of the attitudes and intention between the pre- and post-test.

Generally speaking, the results of this study had expanded our understanding issues related to internal medicine residents' involvement in taking care of people with HIV/AIDS. Specifically, the contributions of this study are two-fold. First, it had facilitated our understanding of the differences between residents' pre- vs. post-training, as well as the differences between residents who had trained vs. had not trained in the AIDS unit in regarding to their knowledge related to HIV/AIDS, attitudes toward, and intention to take care of people with HIV/AIDS. Secondly, similar clinical training can be implemented in other medical specialties since the training had showed effectiveness in increasing residents' knowledge, specific attitudes, and intention after the one-month clinical training in the AIDS unit.

#### 五 計畫成果自評

The investigators of this project are preparing manuscripts for publications. The

results from the project will expand the scopes of existing literature. It will therefore benefit the practice, education and research of HIV care.

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