CHANGES IN SEXUAL BEHAVIOR AMONG AIDS PATIENTS

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ABSTRACT

HIV/AIDS has had a great impact on society because of its high mortality rate and high rate of transmission through sexual intercourse. This cross-sectional study was aimed at studying changes in sexual behavior among AIDS male patients who were followed up at a special outpatient clinic at Siriraj Hospital, Bangkok. Data were collected from 80 patients by self administered questionnaires between 1 November 2008 and 31 December 2009. Descriptive statistics used in this study were percentages, means and standard deviations. Analytical statistics including the Chi-square test, Fisher's Exact test and McNemar's test were also used.

Most of the patients were aged 30-39 years (50.0%), married (52.5%), were employees (58.9%), had average monthly incomes of 10,001 to 20,000 baht (63.8%), and had finished high school (51.3%). The most important symptom when they were first diagnosed was chronic fever (33.8%). Duration of disease was 1-5 years (60.0%). At present most of them have no symptoms (66.2%).

After they were diagnosed with AIDS, they had insignificantly decreased their rate of sexual intercourse with their wives. However, they had significantly reduced their rate of sexual intercourse with girlfriends, prostitutes or boyfriends ($p<0.05$). Condom use was also increased. Ninety to one hundred percent of them used condoms every time they had sexual intercourse after diagnosis. Factors which were significantly associated with a decrease in sexual intercourse with wives were education ($p<0.001$), occupation ($p< 0.05$) and marital status ($p< 0.05$).

In conclusion, male AIDS patients were aware of the risks of disease transmission and had safer sexual behavior. They were more likely to have less sexual intercourse and to prevent the transmission of the disease by use of a condom. These findings confirmed that the patients themselves play an important role in preventing the wider spread of AIDS.

KEY WORDS: AIDS MALE PATIENTS / SEXUAL INTERCOURSE

81 pages

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CHANGES IN SEXUAL BEHAVIOR AMONG AIDS PATIENTS

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บทคัดย่อ

ปัจจุบันโรคเอดส์มีผลกระทบต่อสังคมเป็นอย่างมากเพราะมีอัตราการตายจากโรคนี้สูงและมีการติดต่ออย่างรวดเร็วจากการมีเพศสัมพันธ์ การศึกษาครั้งนี้เป็นการศึกษาวิจัยเชิงสำรวจ มีวัตถุประสงค์ เพื่อศึกษาการเปลี่ยนแปลงพฤติกรรมทางเพศของผู้ป่วยโรคเอดส์ชาย ซึ่งเป็นผู้ป่วยที่เข้ามารับการติดตามการรักษาที่แผนกผู้ป่วยนอก โรงพยาบาลศิริราช กรุงเทพจำนวน 80 ราย โดยการซึ่งตอบแบบสอบถามด้วยตนเอง ระหว่างวันที่ 1 พฤศจิกายน 2551 ถึงวันที่ 31 ธันวาคม 2552 สถิติที่ใช้ ได้แก่ สถิติพรรณนาประกอบด้วย ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และสถิติวิเคราะห์ ประกอบด้วย Chi-square test, Fisher's Exact test และ McNemar 's test

ผู้ป่วยส่วนใหญ่มีอายุระหว่าง 30-39 ปี (ร้อยละ 50.0), สถานภาพสมรสคู่ (ร้อยละ 52.7), อาชีพรับจ้าง (ร้อยละ 58.9), รายได้เฉลี่ยระหว่าง 10,001-20,000 บาทต่อเดือน (ร้อยละ 63.8), จบการศึกษาระดับมัธยมศึกษาตอนปลาย (ร้อยละ 51.3), อาการสำคัญที่มาตรวจรักษาครั้งแรกคือมีไข้เรื้อรัง (ร้อยละ 33.8) ผู้ป่วยส่วนใหญ่เป็นโรคนี้มานาน 1-5 ปี (ร้อยละ 60.0), ขณะนี้ผู้ป่วยส่วนใหญ่ไม่มีอาการ (ร้อยละ66.24)

การเปลี่ยนแปลงพฤติกรรมทางเพศภายหลังทราบว่าเป็นเอดส์พบว่า ผู้ป่วยมีเพศสัมพันธ์กับภรรยา ลดลงอย่างไม่มีนัยสำคัญทางสถิติ แต่กับเพื่อนหญิง, โสเภณีหรือเพื่อนชายกลับมีเพศสัมพันธ์ลดลง อย่างมีนัยสำคัญทางสถิติ ($p < 0.05$) ผู้ป่วยมีการใช้ถุงยางอนามัยเพิ่มขึ้นโดยร้อยละ 90-100 ปัจจัยที่มีความสัมพันธ์อย่างมีนัยสำคัญทางสถิติกับการมีเพศสัมพันธ์กับภรรยาลดลงคือ การศึกษา ($p<0.001$) อาชีพ ($p<0.05$) และสถานภาพสมรส ($p<0.05$)

โดยสรุปผู้ป่วยโรคเอดส์ชายตระหนักถึงความเสี่ยงของการแพร่กระจายของโรคมีการเปลี่ยนแปลงพฤติกรรมทางเพศที่ดีขึ้น ผู้ป่วยมีแนวโน้มที่จะมีเพศสัมพันธ์ลดลง และป้องกันการแพร่เชื้อโรคเอดส์โดยการใช้ถุงยางอนามัย การศึกษาครั้งนี้ยืนยันถึงบทบาทของผู้ป่วยมีความสำคัญในการช่วยป้องกันการแพร่กระจายของโรคมากขึ้น

81 หน้า

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INTRODUCTION

Significance of Problem

The first AIDS case in Thailand was detected in September 1984. In the following years increasing numbers of new cases as well of people with HIV were reported. The first group of HIV infected cases was restricted to homosexual males. In 1989 and 1990, the virus spread to sex workers and their clients , and heterosexual transmission became increasingly important(1).

Given the high prevalence of HIV/AIDS and high accessibility to anti retroviral treatment. Thailand can serve as a model among developing countries. The profile of HIV patients in South East Asia (SEA), especially in Thailand, shows considerable differences to those in developed countries. One of those characteristics is the high prevalence of HIV infection predominantly among heterosexual men and women. In the year 2004, from a total population of 61 million, it was estimated that 1,074,155 persons were infected with HIV since the beginning of the epidemic. Among these, 501,600 have died and 572,500 are currently living with HIV and AIDS. Surveys among males (military conscripts, factory workers and students) and females (factory workers, pregnant women and students) conducted by the HIV/AIDS Risk Surveillance Program during 1995-1999 revealed significant increases in condom use during risky sexual encounters. The rate of constant condom use during sexual encounters with commercial sex workers (CSW) among industrial male workers grew from 15% in 1995 to 58.4% in 2001 and from 9.9% to32.4% with other women. Nevertheless, based on these findings, Thailand is still at risk of having another outbreak of HIV among the general population due to the lack of condom use during casual sex. It was demonstrated that the rate of condom use during sex with CSW among military recruits decreased in the same period from 50.5% to 30.8%. Another characteristic of the HIV epidemic in Thailand is the high rate of HIV transmission

caused by sexual intercourse with CSW. Despite a continuous decline in commercial sex visitations by men, many still engage in casual sex without condoms. For military conscripts, having sex with CSW declined from 50.5% in 1995 to 25.7% in 2001 and among industrial male workers from 31.5% to 17.6% in the same period (2).

After 1989, extensive national awareness campaigns for safer sex and condom use were initiated. They included:

- The "100 percent condom use program" with distribution of free condoms for CSW: the condom use rate among female CSWs increased from 25% in 1989 to 98% in the year 2001.
- Prevention programs among high risk populations including education programs for military recruits, peer education programs for sex workers, migrant workers, fisherman, factory workers.
- Comprehensive STDs case management aimed at accessibility of services for vulnerable populations, effective treatment, counseling for reduction of risk behaviors and partner notification.
- Mass media campaigns and a national STD campaign.
- Enhanced screening for detection of asymptomatic STD cases(3).

The number of people living with HIV worldwide continued to grow in 2008, reaching an estimated 33.4 million. The total number of people living with the virus in 2008 was more than 20% higher than the number in 2000, and the prevalence was roughly threefold higher than in 1990. The continuing rise in the population of people living with HIV reflects the combined effects of continued high rates of new HIV infections and the beneficial impact of antiretroviral therapy. As of December 2008, approximately 4 million people in low- and middle-income countries were receiving antiretroviral therapy—a 10-fold increase over five years In 2008, an estimated 2.7 million [2.4 million–3.0 million] Global estimates 1990−2008. Estimate high and low estimates new HIV infections occurred. It is estimated that 2 million [1.7 million–2.4 million] deaths due to AIDS-related illnesses occurred worldwide in 2008(4).

According to new data in the 2009 AIDS epidemic update, new HIV infections have been reduced by 17% over the past eight years. Since 2001, when the United Nations Declaration of Commitment on HIV/AIDS was signed, the number of

new infections in sub-Saharan Africa is approximately 15% lower, which is about 400,000 fewer infections in 2008. In East Asia new HIV infections declined by nearly 25% and in South and South East Asia by 10% in the same time period. In Eastern Europe, after a dramatic increase in new infections among injecting drug users, the epidemic has leveled off considerably. However, in some countries there are signs that new HIV infections are rising again(4).

The 2010 edition of the UNAIDS report on the global AIDS epidemic includes new country by country scorecards on key issues facing the AIDS response. Based on the latest data from 182 countries, this global reference book provides comprehensive analysis on the AIDS epidemic and response. For the first time the report includes trend data on incidence from more than 60 countries(5).

In 2010 report of patients with AIDS in Thailand, by the Bureau of Epidemiology showed 368,921 the total number of AIDS cases, 97,694 deaths. Trends in number of AIDS patients and deaths from AIDS fell more than in the past. Because of the antiretroviral treatment of AIDS patients, the patients live longer. With a better quality of life(6).

The major mode of transmission of AIDS is through sexual intercourse. We would like to know whether there is any changes in sexual intercourse among AIDS patients after diagnosis. The result of the study may explain the reason of stable incidence of AIDS in Thailand.

Objectives of study

1. To study changes in sexual behavior among AIDS male patients including frequency of sexual intercourse, sexual partner and use of condom.

2. To study association between demographic factors and changes in sexual behavior.

Hypothesis

1. AIDS's male patients have changes in sexual behavior such as frequency of sexual intercourse, type of sexual partner, use of condom

2. There were significant associations between demographic factors and changed of sexual behavior.

Scope of this study

The subject of this study were confined to AIDS male patients who were followed up at special out patient clinic at Siriraj hospital. The data collection was done during 1 December 2008 – 31 July 2009.

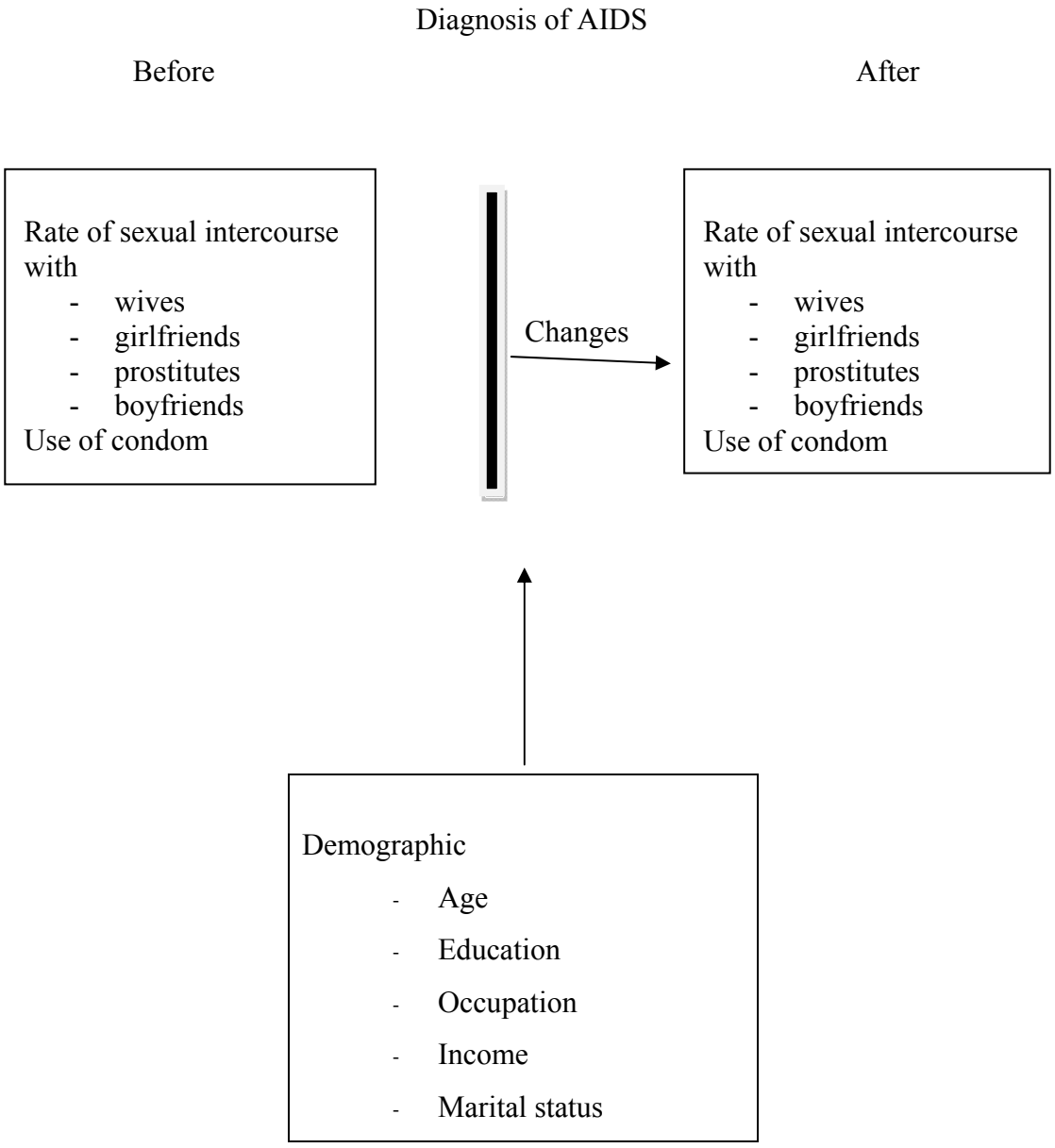
Definition of the study

- Sexual behavior means rate of sexual intercourse with different partners including wife, girlfriend, prostitute, boyfriend

- Male AIDS patient means male patient who were diagnosed to have AIDS for more than 1 year and were follow up at special out- patient clinic in Siriraj hospital.

- AIDS means disease caused by virus or group of symptoms of immune deterioration or defects caused by HIV virus (Human Immunodeficiency Virus: HIV).

Conceptual framework



CHAPTER II
REVIEW AND LITERATURE

AIDS

Acquired immunodeficiency syndrome or acquired immunodeficiency syndrome (AIDS) is a disease of the human immune system caused by the human immunodeficiency virus (HIV).This condition progressively reduces the effectiveness of the immune system and leaves individuals susceptible to opportunistic infections and tumors. HIV is transmitted through direct contact of a mucous membrane or the bloodstream with a bodily fluid containing HIV, such as blood, semen, vaginal fluid, preseminal fluid, and breast milk. This transmission can involve anal, vaginal or oral sex, blood transfusion, contaminated hypodermic needles, exchange between mother and baby during pregnancy, childbirth, breastfeeding or other exposure to one of the above bodily fluids(7).

AIDS is now a pandemic. In 2007, UNAIDS estimated: 33.2 million people worldwide had AIDS that year; AIDS killed an 2.1 million people in the course of that year, including 330,000 children, and 76% of those deaths occurred in sub-Saharan Africa. According to UNAIDS 2009 report, worldwide some 60 million people have been infected, with some 25 million deaths, and 14 million orphaned children in southern Africa alone since the epidemic began.

Genetic research indicates that HIV originated in west-central Africa during the late nineteenth or early twentieth century. AIDS was first recognized by the U.S. Centers for Disease Control and Prevention in 1981 and its cause, HIV, identified in the early 1980s.

Although treatments for AIDS and HIV can slow the course of the disease, there is no known cure or vaccine. Antiretroviral treatment reduces both the mortality and the morbidity of HIV infection, but these drugs are expensive and routine access to antiretroviral medication is not available in all countries. Due to the difficulty in treating HIV infection, preventing infection is a key aim in controlling the AIDS

pandemic, with health organizations promoting safe sex and needle-exchange programmes in attempts to slow the spread of the virus(8).

Signs and symptoms

The symptoms of AIDS are primarily the result of conditions that do not normally develop in individuals with healthy immune systems. Most of these conditions are infections caused by bacteria, viruses, fungi and parasites that are normally controlled by the elements of the immune system that HIV damages. Opportunistic infections are common in people with AIDS. These infections affect nearly every organ system.

People with AIDS also have an increased risk of developing various cancers such as Kaposi's sarcoma, cervical cancer and cancers of the immune system known as lymphomas. Additionally, people with AIDS often have systemic symptoms of infection like fevers, sweats (particularly at night), swollen glands, chills, weakness, and weight loss. The specific opportunistic infections that AIDS patients develop depend in part on the prevalence of these infections in the geographic area in which the patient lives(9).

Cause

A generalized graph of the relationship between HIV copies (viral load) and CD4 counts over the average course of untreated HIV infection; any particular individual's disease course may vary considerably. $CD4^+$ T Lymphocyte count (cells/mm^3) HIV RNA copies per ml of plasma

AIDS is the ultimate clinical consequence of infection with HIV. HIV is a retrovirus that primarily infects vital organs of the human immune system such as $CD4^+$ T cells (a subset of T cells), macrophages and dendritic cells. It directly and indirectly destroys $CD4^+$ T cells.

Once HIV has killed so many $CD4^+$ T cells that there are fewer than 200 of these cells per microliter (μL) of blood, cellular immunity is lost. Acute HIV infection usually progresses over time to clinical latent HIV infection and then to early symptomatic HIV infection and later to AIDS, which is identified either on the basis

of the amount of $CD4^+$ T cells remaining in the blood, and/or the presence of certain infections, as noted above.

In the absence of antiretroviral therapy, the median time of progression from HIV infection to AIDS is nine to ten years, and the median survival time after developing AIDS is only 9.2 months. However, the rate of clinical disease progression varies widely between individuals, from two weeks up to 20 years.

Many factors affect the rate of progression. These include factors that influence the body's ability to defend against HIV such as the infected person's general immune function.- Older people have weaker immune systems, and therefore have a greater risk of rapid disease progression than younger people.

Poor access to health care and the existence of coexisting infections such as tuberculosis also may predispose people to faster disease progression. The infected person's genetic inheritance plays an important role and some people are resistant to certain strains of HIV. An example of this is people with the homozygous CCR5-Δ32 variation are resistant to infection with certain strains of HIV. HIV is genetically variable and exists as different strains, which cause different rates of clinical disease progression.

There are a number HIV and AIDS misconceptions. Three of the most common are that AIDS can spread through casual contact, that sexual intercourse with a virgin will cure AIDS, and that HIV can infect only homosexual men and drug users. Other misconceptions are that any act of anal intercourse between gay men can lead to AIDS infection, and that open discussion of homosexuality and HIV in schools will lead to increased rates of homosexuality and AIDS(10).

Diagnosis

The diagnosis of AIDS in a person infected with HIV is based on the presence of certain signs or symptoms. Since June 5, 1981, many definitions have been developed for epidemiological surveillance such as the Bangui definition and the 1994 expanded World Health Organization AIDS case definition. However, clinical staging of patients was not an intended use for these systems as they are neither sensitive, nor specific. In developing countries, the World Health Organization staging system for HIV infection and disease, using clinical and laboratory data, is used and in

developed countries, the Centers for Disease Control (CDC) Classification System is used(10).

Factor that promote spread : Unprotected sexual activity

-Most HIV/AIDS infections are acquired through casual, unprotect sex 80%-90% HIV infected in the region are transmitted through heterosexual contact.
The most vulnerable men and woman are those

- Engaging in sex with multiple partners and powerless to adopt/negotiate safer sex practices such as use of condoms. These may include workers, truck drivers, migrant workers, street children and other youth groups.

- Having sexually transmitted diseases (STD) such as genital ulcers and discharges ; the risk of HIV in the presence of STD increases four-to-tenfold.

While men and women, both, are vulnerable to HIV the latter are more so because they can neither force their partners to use condoms nor may they have easy access to STD treatments.

There is a great and urgent need to promote behaviours which enable the population to practice safer sex, and to provide services such as condoms and STD treatment(11).

Key to prevention

Implementing large-scale information and education programmes is essential for HIV/AIDS prevention. The messages must however be sensitive to cultures, traditions, the environment, and the literacy levels of the people.

- Prevention intervention programmes must be targeted at populations with high-risk behaviour, as a matter of priority.

- AIDS education and information must also reach various population groups which include young people-in and out of school, factory workers, as well as the general population.

- Ensuring wider availability of and accessibility to condoms, and provision of STD case management services-as an integral part of prevention interventions is, indeed, crucial for facilitating behaviour change.

- Government in collaboration with Red Cross societies and other NGOs have the responsibility to ensure safe blood transfusion through promotion of voluntary donations and screening of blood for HIV antibodies(11).

Sexual contact

The majority of HIV infections are acquired through unprotected sexual relations between partners, one of whom has HIV. The primary mode of HIV infection worldwide is through sexual contact between members of the opposite sex.

During a sexual act, only male or female condoms can reduce the risk of infection with HIV and other STDs. The best evidence to date indicates that typical condom use reduces the risk of heterosexual HIV transmission by approximately 80% over the long-term, though the benefit is likely to be higher if condoms are used correctly on every occasion.

The male latex condom, if used correctly without oil-based lubricants, is the single most effective available technology to reduce the sexual transmission of HIV and other sexually transmitted infections. Manufacturers recommend that oil-based lubricants such as petroleum jelly, butter, and lard not be used with latex condoms, because they dissolve the latex, making the condoms porous. If lubrication is desired, manufacturers recommend using water-based lubricants. Oil-based lubricants can be used with polyurethane condoms.

Female condoms are commonly made from polyurethane, but are also made from nitrile and latex. They are larger than male condoms and have a stiffened ring-shaped opening with an inner ring designed to be inserted into the vagina keeping the condom in place; inserting the female condom requires squeezing this ring. Female condoms have been shown to be an important HIV prevention strategy by preliminary studies which suggest that overall protected sexual acts increase relative to unprotected sexual acts where female condoms are available. At present, availability of female condoms is very low and the price remains prohibitive for many women.

Studies on couples where one partner is infected show that with consistent condom use, HIV infection rates for the uninfected partner are below 1% per year. Prevention strategies are well-known in developed countries, but epidemiological and behavioral studies in Europe and North America suggest that a substantial minority of

young people continue to engage in high-risk practices despite HIV/AIDS knowledge, underestimating their own risk of becoming infected with HIV.

Randomized controlled trials have shown that male circumcision lowers the risk of HIV infection among heterosexual men by up to 60%. It is expected that this procedure will be actively promoted in many of the countries affected by HIV, although doing so will involve confronting a number of practical, cultural and attitudinal issues. However, programs to encourage condom use, including providing them free to those in poverty, are estimated to be 95 times more cost effective than circumcision at reducing the rate of HIV in sub-Saharan Africa. Some experts fear that a lower perception of vulnerability among circumcised men may result in more sexual risk-taking behavior, thus negating its preventive effects.

However, one randomized controlled trial indicated that adult male circumcision was not associated with increased HIV risk behavior. Studies of HIV infection rates among women who have undergone female genital cutting (FGC) have reported mixed results; for details see Female genital cutting HIV.

A three-year study in South Africa, completed in 2010, found that an anti-microbial vaginal gel could reduce infection rates among women by 50% after one year of use, and by 39% after two and a half years. The results of the study, which was conducted by the Centre for the Aids Programme of Research in South Africa (Caprisa), were published in Science magazine in July 2010, and were then presented at an international aids conference in Vienna(12).

HIV infection & AIDS in general

Acquired Immune Deficiency Syndrome (AIDS) has been expressed by Daniels, (1987) for common understanding as “acquired means caught as opposed to inherited.” Immune Deficiency implies poor defence mechanisms against infections and Syndrome is a group of illness which helps to identify a particular disease in this case AIDS. He further stated that the global menace of AIDS cannot be overstated. In order to reduce its rate of spread people everywhere, whatever their cultural or religious perspective, must face the challenge posed by HIV-infections and AIDS. It is

a challenge that requires each of us to reconsider our traditions, morals, values, behaviors, and to respond positively to the pandemic(13).

Mode and route of transmission of HIV infection

Epidemiological studies throughout the world have established that there are three modes of HIV transmission (WHO 1991). These are as follows:

1. through sexual intercourse both heterosexual and homosexual,
2. through, blood products, transplanted organ, or tissues and lastly,
3. from an HIV infected woman to her fetus or infant, before, during or shortly after birth, HIV infection can be transmitted through unprotected sexual intercourse (wet sex), that is, any penetrative sexual act un which a condom/rubber sheath is not properly used. All types of sexual encounter with an HIV infected person whether anal, vaginal or oral are all potential routes of transmission from an infected man to a woman, or to another man.

The WHO journal on HIV/AIDS of 1991 reported that HIV infection can be transmitted through blood transfusion, use of non-sterile equipments such as contaminated needles, or other invasive instruments, sharing of unclean needles and syringes mainly IDUs. It is also transmitted through tissues or organ transplants, for instance, sperm donated by an HIV infected person can cause infection on the woman recipient for artificial insemination. Similarly, organs donated by HIV infected person can cause infection on the recipient. Lastly, HIV infection can be transmitted from an HIV infected woman to her fetus or infant during or shortly after delivery. In the same publication of WHO it was reported that a pregnant woman infected with HIV approximately has around 30% chances of passing the virus to her fetus or new born baby. It was stated that HIV can be transmitted while in utero that is during the birth process and through breast-feedings(13).

HIV/AIDS "chain of transmission"

In the present, Thai HIV experience, mainly two groups play a vital role in the epidemic's "chain of transmission" they are female commercial sex workers (prostitutes) and sexually active men(14).

2.3.1 HIV infection and AIDS on female commercial sex workers (prostitutes).

From May 1985 through May 1995, all reported serosurveys of female prostitutes in Thailand detected nil HIV infection or rate 1% (Weniger 2000). The first National sentinel serosurveys detected HIV infection in 44% (44 out of 100) of a low-based prostitution in Chiangmai. This high rate in Chiangmai was confirmed in a follow up study in August 2002 by Siraprapsiri and Thanprasertsuk, (2004) in which 37% (87 out of 238) were found HIV positive and the incidence of seroconversion was measured at 10% per month. Seven and eleven months later, monthly intermediately seroconversion rates in those women remained at 4.8 and 3.4% respectively(15).

The National median provincial rates for brothel-based prostitutes increased steadily from 3.5 of (range 0-44% n=13 province) in June 1995 to 15% (range 2-63% n=69). Among brothel-based female prostitutes, factors significantly associated with the HIV positive were:

1. greater frequency of sexual intercourse odds ratio (OR) 2.52 for frequency 3 times per day, and OR 36.7 for 6 time per day.
2. condom usage rate 50% (OR 2.25)
3. lower sexual service charge OR 22.9 for 50 baht, OR 11.37 for 100 baht.

2.3.2 Sociology of heterosexual prostitution

Weniger, et al in 2002 found out that the largest proportion of heterosexual prostitution in Thailand occurs in brothels (SAMNAK) and tea houses (Rong NAM CHA) that cater to urban and rural lower income male laborers and agricultural workers, who pay from 30 baht to about 200 baht for sexual services. Women working in such brothels and tea houses and similar establishment are referred as brothel-base prostitutes.

Chandeying et al, (2002) noted that Indirect female prostitutes work in massage parlors, bars, night clubs, discos, and coffee shops, Their negotiated tip for the sexual services may vary from 200 baht, to about 1,500 baht(16).

Risk factor for HIV infection among men in Thailand

Among, heterosexual men unprotected sex or wet sex with female prostitutes happens to be the primary factor contributing to HIV transmission (Weniger et al, 2004). Of 55 HIV positive male STD (Sexually transmitted disease) clinic patients with no risk factors other than heterosexual activity, 44 (84%) had used prostitutes in previous years. This clearly indicates that the chance of getting HIV infection through heterosexual intercourse with prostitutes, which is further supported by the findings of Pongswatanakusiri et al, (2004) that the greater frequency of sex with prostitutes correlated significantly with HIV seropositivity, for in a survey of 1,654 male laborers at 13 factories and other work sites in Bangkok in February-April 2004, 12 (0.7%) HIV positive laborers were detected, of whom 11 had past history of sexual encounter with female prostitutes and one was a homosexual(16).

Sexual behavior(17)

Behavior can be divided into type:

1. Overt behavior is the external conduct that other people can be easily observed.

2. Covert behavior is the internal conduct that occurs in people minds and can not be observed. No one else except the person who acts know when the internal conduct dose exist. For example, sense, perception, memory and decision etc.

Therefore, the term ‘sexual behavior’ encompasses both covert and overt behavior of a person. It is a reaction when a person is sexually aroused.

There are five factors that based on sexual behavior. Those are the external stimuli, such as vision, taste, smell, sound, and touch. They can be perceives by eyes, tongue, nose, ears, and senses. The sensory perception will be processed in the brain.

Then the automatic nervous system will translate the stimuli signal into sexual sensation. Level of feelings depends on emotional development, and physical fitness.

Human being have many sexual outlets, there are:

1. Solitary activities: masturbation and nocturnal sex dreams
2. Socio – sexual activities:
   - heterosexual relationship: petting and coitus
   - homosexual relationship: exclusive homosexual and bisexual

The sexual system

The Abramson's sexual system theory is a basic integrative framework in understanding human sexual behavior including adolescent sexual activity. Abramson describes his assumption in his sexual system theory that " all decision regarding sexual expression are controlled by a hypothetical mechanism referred to as a cognitive structure." In order words, sexual expression is directly controlled by cognitive structure. Furthermore, Abramson hypothesizes that the development of cognitive structure is determined by four classes of input:

1. Maturation is the process of growing up physiologically an intellectually in personality. It acts as a phase of development from childhood to adulthood.

2. Social norms are also important in understanding adolescents behavior about sex life. Adolescents learn to accept social standards form peer, social groups and mass media influence from social norms determines cognitive structure, particularly standards mediated by the powerfully determined adolescents behavior.

3. Internalized parental standards: parental standards play and important role in adolescent sexual behavior. Adolescent learn and value sexuality form the way their parents socialize them. For example, those children who are socialized by the parents to avoid open discussion about sex are more likely to perceive that sexuality is not mention and corruptible.

4. Previous sexual experience has feedback effect on experience which may be perceived as guilt, may result in unplanned conception. It will be strengthened if previous sexual experience is satisfactory.

Moreover, Abramson also proposes that the cognitive structure gives rise to sexual expression in response to sexual stimulus cues. Which can be categorized on to 4 groups as follows:

1. Endocrinological events (physical arousing due to hormones)

2. Conditioned and unconditioned stimuli (erotic arousal associated with events and perceptions such as sexual movies, pornographic books)

3. Physiological events (physical arousing due to the central and autonomic nervous system)

4. Situation parameter (influences due to the nature of the social environment such as taking drugs, alcohol)

In addition, Abramson explains the sexual system that the intellectual structure is a result of accumulated experience together with other factors such as age, social norms, parent standards, and previous sexual experience, all of which contribute to a person's code of sexual conduct. This code of sexual conduct control a person's overt sexual behaviors which vary according to leading factors. For example, whether or not a child will be successful in learning about sex is a direct consequence of the partners' reaction – scolding, admiring or ignoring when a child has a sexual act. The parents'belief in sex becomes a child's standard, principle, or intellectual structure. Furthermore, sexual arousal such as direct arousal form a lover, or indirect situations such as watching a pornographic movie, will stimulate a person to have sexual behaviors, either appropriate or inappropriate behaviors. And these behavior will then become that person's previous sexual experience.

In addition to Abramson's theoretical explanation of sexual behavior, Brooks – Gunn and Furstenberg have discussed factors associated with adolescents' sexual behaviors similar to Abramson's. Based on previous studies, they categorize factors relating to adolescents' sexual behaviors as follows:

1. Biological perspectives: of the biological change associated with puberty, hormonal factors are thought to account in some part of the onset of sexual activity, either by effects occurring parentally or activation effects that change hormonal levels at puberty. Hormonal activation may influence behavior directly by the social stimulus associated with physical changes. For example, more physically

mature girls seem to elicit more freedom from parents, perhaps marking it more likely for them to engage in dating and ultimately have early sexual behavior.

2. Parental influences: Parental influences on sexual behavior are believed to be strong. Certain styles of family interactions enhance social cognitive abilities, such as role – taking, decision – marking and moral judgments. These parental styles may promate greater feeling of self – efficacy, which in turn could influence sexual behavior.

3. Peer influences: Perceptions about what one's peers are doing or that is normative in one's peer group are more strongly associated with sexual behavior.

4. Academic perspectives: Teenagers who are not doing well in school and do not have educational aspirations are more likely to have sex during adolescence than those faring better in school.

5. Social cognitive perspectives: Social cognitive abilities often associated with sexual decision marking provide yet another and largely unexplored perspectives for understanding sexual transitions among adolescents.

In addition to development of adolescence, conclusion about sexual behavior of Oprasertttsawat P, Abramson's sexual system theory and the factors that Brooks – GUNN Furstenberg discussed, the researcher will approve into frame work of this study which can be categorized onto 5 groups as follows:

1. Personal factors:
- Biological and maturation means gender, academic achievement and the students who are studing in M.S.3 secondary school that is the same age.
- Allowance
- Residence

2. Sexual knowledge and opinions toward sex during school age means academic factor and previous sexual experience.

3. Family Factors:
- Parental standard means parents' occupation parents' marital status and familial problem solving.

4. Social factors:

- Person to consult about sex, source of sexual knowledge, residence area and school area

5. Sexual stimulus factor

- Sexual stimulus cues means exposure to sexually arousing media, viewing of parents or family member coitus, viewing of closed friend coitus, touching of each other between males and females, previous visits to entertainment establishments and substance abuse (Alcoholic drinking, usage of Amphetamine drug, usage of Marihuana and cigarette smoking)

Measurement of sexual behavior is done through the use of questionnaire because:

1.The questionnaire can test human behaviors in large group of subjects.

2. The questionnaire can test the concealed behavior that can not be observed at the moment.

3. The questionnaire can test covert behavior.

Sexual transmission(18)

Main article: sexually transmitted disease

Sexual transmission occurs with the contact between sexual secretions of one person with the rectal, genital or oral mucous membranes of another. Unprotected sexual acts are riskier for the receptive partner than for the insertive partner, and the risk for transmitting HIV through unprotected anal intercourse is greater than the risk from vaginal intercourse or oral sex.

However, oral sex is not entirely safe, as HIV can be transmitted through both insertive and receptive oral sex. Sexual assault greatly increases the risk of HIV transmission as condoms are rarely employed and physical trauma to the vagina or rectum occurs frequently, facilitating the transmission of HIV. Drug use has been studied as a possible predictor of HIV transmission. Perry N. Halkitis found that methamphetamine usage does significantly relate to unprotected sexual behavior. As a result of these findings, methamphetamine users are at a higher risk for contracting HIV.

Other sexually transmitted infections (STI) increase the risk of HIV transmission and infection, because they cause the disruption of the normal epithelial barrier by genital ulceration and/or microulceration; and by accumulation of pools of HIV-susceptible or HIV-infected cells (lymphocytes and macrophages) in semen and vaginal secretions. Epidemiological studies from sub-Saharan Africa, Europe and North America suggest that genital ulcers, such as those caused by syphilis and/or chancroid, increase the risk of becoming infected with HIV by about fourfold. There is also a significant although lesser increase in risk from STIs such as gonorrhea, chlamydia and trichomoniasis, which all cause local accumulations of lymphocytes and macrophages. Transmission of HIV depends on the infectiousness of the index case and the susceptibility of the uninfected partner. Infectivity seems to vary during the course of illness and is not constant between individuals. An undetectable plasma viral load does not necessarily indicate a low viral load in the seminal liquid or genital secretions.

However, each 10-fold increase in the level of HIV in the blood is associated with an 81% increased rate of HIV transmission. Women are more susceptible to HIV-1 infection due to hormonal changes, vaginal microbial ecology and physiology, and a higher prevalence of sexually transmitted diseases. People who have been infected with one strain of HIV can still be infected later on in their lives by other, more virulent strains.

Infection is unlikely in a single encounter. High rates of infection have been linked to a pattern of overlapping long-term sexual relationships. This allows the virus to quickly spread to multiple partners who in turn infect their partners. A pattern of serial monogamy or occasional casual encounters is associated with lower rates of infection.

HIV spreads readily through heterosexual sex in Africa, but less so elsewhere. One possibility being researched is that schistosomiasis, which affects up to 50% of women in parts of Africa, damages the lining of the vagina.

General male's sexual behavior

In general, men tend to be more promiscuous than women as cited by Chandeying et al, in 2004 mainly due to the highly discredited "double standard" much more tolerant attitude towards the sexual activities of men than of women, especially in the region. Women who gets caught in sexual activities outside the marriage may still face many undesired confrontations and disapproval. Whereas men both married and unmarried may enjoy the freedom of promiscuity at large(19).

Chandeying et al (2002) cited that still large number of men visit female prostitutes all over the world for a variety of reasons and motives. For instance, a young man inexperienced in sex with women may visit a female prostitute as a learning experience. A traveling businessmen may rely on prostitutes for both sex and companionship. While a married man may patronize female prostutites when his fails to fulfill his sexual needs and desires, either in frequency or types or makes him feel inadequate through her lack of enthusiasm in responding to his sexual urge. Evidently, Jone KL,et al, (1995) found that men interested more in oral or anal sex than vaginal coitus types and with problems of impotence find prostitutes highly skillful, stimulating and co-operative which further also eliminate or minimize the psychological factors contributing to impotence; Sadists and masochists often hire prostitutes to cater to their unusual needs(19).

Thai male's sexual behavior

In Thailand, a high proportion of men have multiple sex partners and visit prostitutes. Sittitrai, et al, (2004) stated that during 2002-2003, 20% of 1,126 men selected by stratified random sample nationwide reported having sex outside their marriage, of these 28%, 77% yielded to giving money or other items in exchange of sex as reported. About 600 randomly selected men aged 15 years were surveyed in early 2003 in Bangkok and in each of the four regions, 75% reported having ever visited prostitutes in a period of 6 months, 26% of them reported sex with multiple female partners and 16% sex with prostitutes. A history of ever visiting prostitutes reported by 43% of 1,176 male vocational students (20).

In Thailand, now there is an anticipated wave of HIV infection on non-risk population. Men who have sex with prostitutes place their non-prostitutes sexual

partners wives/girlfriends/acquaintances and their new born children at risk for HIV-infection (21).

Literature review

Sexual Behaviors and Condom Use Among Persons Living with HIV / AIDS (2541)/ChutimaPornhamsr (22)

This study aimed to examine sexual behavior and condom use in HIV and HIV / AIDS patients. The study on the infection of HIV / AIDS patients to be informed of their blood at least three months attending services at the first clinic consultant consulting health Bamrasnaradura institutions. Questionnaire to collect data during June and July 2546 number 146 the results showed that a male of 81 patients (55.1%) aged 20-54 years, most high school graduates up(45.1%), married(39.1%) and note that they are infected with HIV from 3 months - 15 years during the three months to continue having sex(69.2%) in those who also have sex are using condom every time(60.4%), using condoms occasionally or not(39.6%). Disclosure of blood with a spouse or partner percentage 75.5 who have sexual intercourse and sharing of blood with a spouse or partner have use condoms every time higher than the blood does not reveal the spouse or partner 1.49 times (95% CI = 0.51 - 2.45) but not statistically significant. Compared perceptions of people with AIDS to see that those who used condoms every time a perception that most people do not use condoms consistently statistically significant ($p = 0.008$) this study shows that HIV / AIDS is still part of sexual behavior at risk of infection. And infection can be added to their body, so the services of consultants, especially HIV counseling continued. Should be an important service for HIV / AIDS patients to achieve the knowledge and awareness continues to reduce sexual risk behaviors.

Sexual behavior for HIV-infection in young men in Payao (23)

The prevalence of HIV infection in new conscripts was rising dramatically units in Payao Province which is located in the upper north near Chiang Rai. In November 1991 it was increased to nearly 20 percent especially in one military unit in Chiang Kam

The sample consisted of 157 men in one battalion, age from 21-23. Most of the men in the study were single(77.6%). All of them were born in Payao and most(84.5%) were also in Payao at the time of recruitment. About 3/4of them were from Chiang Kam and June district. The HIV prevalence among the whole sample was 14%. Intravenus drug use was unusual(1.3%)

Approximately 80% of the men had primary school education. Most of them(71.2%) were farmers, followed by laborers(23.7%) and other occupations.(5.1%)
Table.Education

	No.	Per-cent
Less than primary school	14	8.9
Primary school	125	79.6
Secondary school	9	5.7
High school	9	5.7
Total	157	100

Conclusion

The men in the study tend to come from the least privileged families. Almost all of them had sexual experience with low-priced prostitutes(less than 100 Baht) and always using condoms with prostitutes. A history of STD symptoms among these men was common ,and it may also be common in women. The use of Alum of vaginal douche by prostitutes might represent an additional possible facilitating factor in the transmission of HIV as STDs do.

Frequent sex with prostitutes at least once a month and low levels of condoms use were significant risk sexual behaviors of the sample population.

Sexual behavioral change for acquire HIV study of UNAIDS (24)

As information was initially, for many, thought to be the key to behavior change, HIV prevention programmes began with a focus on increasing awareness about the modes of transmission and prevention (Cohen, 1992). Mass education for HIV prevention can take many forms but is often seen as a key component of a comprehensive AIDS prevention programme (Holtgrave, 1997). Mass media, for example, are directed to the

general public and aim at teaching people essential facts, promoting healthy behavior, quieting anxiety about casual transmission and preventing discrimination

An analysis of the messages adopted by the information and education programmes of national AIDS control programmes of 38 different countries found that over 90% focused on correcting misperceptions about AIDS. About 80% provided information about per sonal risk assessment (Cohen, 1992). In many countries, mass education provided the first step to national AIDS control programmes. Many mass education efforts successfully raised AIDS awareness by informing individuals of the risks of HIV infection, and in some cases education-based programmes were sufficient to change high risk behaviors, increase condom sales, and reduce new HIV infections (Kalichman, 1997). The channels that national AIDS control programmes have used for mass education include targeted media, printed media and electronic media (Cohen, 1992).

A review of 49 studies covering 18 countries to identify empirical outcomes or evaluate impact of HIV-related mass-media campaigns in 1996 concluded that most campaigns aiming at "individual-level goals of knowledge, attitude or behavioral changes were generally successful at achieving these goals" (Holtgrave, 1997).

However, behavioral endpoints of the projects reviewed were not mentioned. In addition, as the author himself pointed out, a substantial number of the project reports reviewed lacked methodological details; they were reported in conference abstracts. It is therefore difficult to conclude on the relative meaning of the term "successful", particularly in relation to behavioral outcomes.

One innovative approach targeting hard-to-reach populations in the USA with information and counseling was a multiple session intervention designed to be delivered over the telephone. One reason for this method was to reach populations that do not want to meet a health care provider face-to-face. In an evaluation of the study, the researcher found significant effects of their telephone-based counseling including a decrease in unprotected intercourse form 47% to 26% of the men who completed the programme (Roffman, 1997).

Another study in Uganda looking at gender differences and perception of risk noted that participation in small-group AIDS education was associated with some protective behaviors for women with evidence of a dose response effect. The author

suggests that these AIDS education events may also provide a socially sanctioned opportunity for peer group interaction for women (Bunnell, 1996).

Especially the USA small-group AIDS prevention efforts have evolved since the beginning of the epidemic from providing basic information in community groups and sensitizing people to personal risk sensitization. Subsequently, interventions began instructing people on condom use skills, eroticizing safer sex, and building safe sex communication skills. Through interventions encompassing these elements, many people have reduced high-risk sexual behavior.

Sexual behavior in Thai HIV-positive patients after the anti retroviral therapy/Marcin Pietraszkiewicz, Mahidol University (25)

This cross-sectional descriptive study aimed to assess patterns of sexual behavior, attitudes towards and knowledge about HIV/AIDS, and levels of perceived acceptance in Thai HIV infected patients after the initiation of HAART. 200 HIV-positive men and women aged 22-58 years, on HAART for 5-28 months, and a reported marked physical improvement, were interviewed by structured questionnaire in November-December 2005, in Chonburi Hospital, Eastern Thailand.

Result : Majority were men(60%), median age was 34 years, heterosexual(71%), married(59%), most had primary or secondary school education, and low income status. We assessed sexual behaviors after HAART and differences in reporting those behaviors perceived before HAART. For men, the numbers of non-regular and commercial partners decreased sharply after ART, but almost 20% still continued visiting CSW after HAART. Among men, perceived “100% condom use” with regular partners grew by more than one-third, to 60%, and with non-regular partners by 17%, to 35%, after HAART. One-fourth of male subjects refused to use condoms with regular partners after HAART. 31% of females still had unprotected sex with regular partners after HAART. Among men, 18% and 26% of women did not use condoms at their last sexual encounter.

Three-fourths of subjects had incorrect beliefs about safe-sex behaviors and HIV transmission under HAART. There was a striking overall negative attitude towards HIV infection itself and a high level of stigmatization among patients on HAART. In spite of a positive trend, 64% still experience intolerance at home, the work place, among friends and in health care facilities. Most of the subjects showed

higher levels of optimism and felt less depressed after HAART. There were some associations between perceived safe-sex behaviors and disclosure to partner, marital status and ART duration.

We recommend collecting baseline data on sexual behaviors, psychological condition, beliefs and attitudes before starting ART, to monitor changes over time. Intensive risk-reduction counseling and routine STD screening are needed. Treatment programs should emphasize consistent condom use with regular and non-regular partners, further reduction of CSW visits and disclosure. It is necessary to inform patients about continued HIV transmission under HAART. HIV-patients'self-esteem needs to be improved by integration of mental health services with HIV primary care. Sexual education and condom use campaigns for non HIV-infected persons should be reinforced.

Sexual behavior of AIDS patients receiving antiretroviral therapy./ Saphung District, Lei Province (26)

This study is qualitative research. Use a quick survey (Rapid Assessment Process) data was collected. Purposively selected samples and voluntary participation project. The depth interview with AIDS patients receiving antiretroviral therapy, both male and female of 24 person.

The results

1) AIDS patients, both male and female strength when receiving antiretroviral therapy. However, when patients have been treated with antiretroviral therapy for patients with more hope in life. And patients with good health will return to society.

2) AIDS patients were to participate in the antiviral drug. All patients seeking knowledge.

3) Sex of the patient when the patient was healthy, well after receiving antiretroviral therapy would have wanted to have sex

Research shows that AIDS patients receiving antiretroviral therapy. When healthy, then the perception of sex is like having sex like a normal person. Has a new family and AIDS patients receiving antiretroviral therapy is appropriate sexual behavior. Don't cause resistance to infection. By wearing a condom every time you have sex, have sex a safe (Safe Sex), and some patients no sex.

HIV risk among Latino adolescents in two New England cities/ Smith et al. (27)

Smith on studied HIV among 80 Latino adolescents in two New England cities in year 1990 found that the frequency of sexual intercourse was 25.3 times per six month.

Factor associated of prevention of AIDS among student of a technology college Bangkok/ Cheamphachathanakal C. (28)

Cheamphachathanakal C. studied factors associated of prevention of AIDS among 100 students of technology college in 1994. The result showed that 33.1% of students had engaged in sexual activities. The youngest age to have first coitus was 13 years old. Partner of first coitus were the lovers(50%) and girlfriends(31.8%). The frequency of coitus was 19.55 times per year.

Sexual behavior and factor association with coitus among adolescent students in the municipality of Surin Province/ Haohan J. (29)

Haohan studied on sexual behavior and factor association with coitus among 100 AIDS patients in England in 1996, found 2% of patients were diagnosed of AIDS for 15 years. Since sexual activities occurred at a very young age, young AIDS patients can be found not surprisely

Change sexual behavior among AIDS patients/ Bunnell (30)

Bunnell studied found that among 150 male HIV patients in Uganda 1992 , only 30% of they had sexual intercourse with wife after the diagnosis. Eight percent were divorced, 5% were separated and 3% were dead wives**.** In this study there was no significantly different in rate of sexual intercourse with wife this may be due to the fact that they feel that sexual intercourse with wives were safe and they had usually used condom.

Sexual behavior and prevention among adolescent students in Japan/ Kirungi (31)

Kirungi studied after diagnosis of HIV 40% had sexual intercourse with wife HIV among 150 male patients in England 1996, 15% had sexual intercourse with prostitute, 12% had sexual intercourse with girlfriend and 2% with boyfriend.

Sexual behavior and prevention among women in rural areas in Zhejiang province/ Musinguzi (32)

Musinguzi studied on the epidemiological characteristics of HIV infected immigrant marriage women in rural areas in Zhejiang province found that among 36 concordant-positive couples, 63.9% (23 cases) reported never using condom in marriage sexual behavior before being detected HIV positive. This revealed the significant factors of contract HIV was marriage sexual behavior. In conclusion, it is showed that premarital unsafely sexual behavior, in-marriage sexual behavior without condom, delayed detection of HIV are risk factors for HIV infection and transmission.

Prevention transmission among AIDS patients in Germany/ Asiimwe (33)

Asiimwe studied found 9% decrease in casual sex in the past year. The study of a fact that 40% of men and 30% of women increase in use condom, respectively.

Demographic factors and changes in sexual behavior of AIDS patients in Japan/ Mermin (34)

Mermin studied showed association between demographic factors and changes in sexual behavior of AIDS patients in Japan, Factor which were significantly associated with decrease in sexual intercourse with wives, after diagnosis of AIDS, they were education ($p<0.05$), occupation ($p< 0.05$) and marital status ($p<0.05$).

CHAPTER III
MATERIALS AND METHODS

Research design:

This study is a cross-sectional survey research.

Population and sample

The population of this study were 80 male AIDS patients who were diagnosed to have HIV infection more than 1 year. They were followed up at special out- patient clinic in Siriraj hospital during 1 December 2008 – 31 July 2009.

Sample size

We calculate sample size by formula.

$$n = \frac{\left(Z\frac{\alpha}{2}\right)^2 PQ}{d^2}$$

n = Estimated sample size

Z = Standard normal deviation at 0.05=1.96

$\propto$ = Type I error at level of 95%

P = 0.692 ; this is the rate of sexual intercourse among AIDS patients.(22)

Q = 1-P= 0.318

d = Allowable error in this study 15%

n = $(1.96)^2(0.692)(0.318) / (0.1038)^2$

n = 78.460 cases

The minimum required sample size for this study was 80 cases

Research instrument

In this study, the instrument was a questionnaires composed of four parts.

Part 1 The characteristics of male AIDS patient included:

- Age
- Education
- Occupation
- Income
- Marital status
- Resting-place

Part 2 Sexual behavior before they were diagnosed of AIDS (AIDS's male patient with wife, girlfriend, prostitute, boyfriend)

Part 3 Symptom when diagnosis and sexually transmitted disease

Part 4 Sexual behavior after they were diagnosed of AIDS (AIDS's male patient with wife, girlfriend, prostitute, boyfriend)

Process in research

1. A letter from the Faculty of Graduate Studies, Mahidol University is submitted to principles of hospital for permission in data collection.

2. Explained to the study participants by volunteer interview who themselves were HIV infected.

3. Male AIDS patient complete the questionnaire.

4. Research collected all the questionnaire.

Analysis of the data

Data Processing

The data collected have been processed in microcomputers using SPSS/PC for data entry and analysis.

Data Analysis

Descriptive statistics, analysis of categorical data and regression analysis were carried out by using the computerized statistical package for social science(SPSS/PC)

The data were analyzed by using the following statistical test: frequency, percentage, mean, standard deviation, Chi-square test, Fisher's Exact test, McNemar test.

CHAPTER IV
RESULTS

Result of the study is presented as follow

1.General characteristics: age, education, marital status, occupation, income,

2.General characteristics of disease: main symptom when diagnosed, duration of disease, main present symptoms, associated STD.

3.Changes of sexual behavior among AIDS patients.

4.Association between demographic factors and change sexual behavior among AIDS patients.

Part I: General characteristics of patients.

Table I: General characteristics of patients(N= 80)

	no.	%
Age(years)		
Total	80	100.0
20 – 29	5	6.3
30 – 39	40	50.0
40 – 49	26	32.5
50 – 59	9	11.3
$\bar{x}$±SD. 39.3 ±6.92, range 24.0-55.0 years		
Education		
Elementary and junior high school	13	16.3
High school and Diploma	41	51.3
Bachelor degree or more	26	32.6

	no.	%
Marital status		
Single	29	36.3
Married	42	52.5
Widowed, Divorce, Separated	9	11.4
Occupation		
Government official and state enterprise employee	20	25.1
Merchant	13	16.3
Private employee	47	58.9
Income (bath/month)		
≤10,000	21	26.3
10,001 – 20,000	51	63.8
>20,000	8	10.0
$\bar{X}$±SD. 16,836.1±8,267.8, range 4,000-55,000 (bath/month)		

Most of male AIDS patients aged 30-39 years (50.0%) and 32.5% aged between 40-49 years. (Table I)

Most of male AIDS patients finished high school (51.3%) and 32.6% finished bachelor degree or more.(Table I)

Most of male AIDS patients were married (52.5%) and 36.3% were single. (Table I)

Most of male AIDS patients were employee (58.9%) and 25.1% were government official or state enterprise employee. (Table I)

Most of male AIDS patients had average monthly income of 10,001 to 20,000 baht/month (63.8%) and 26.3% had income of ≤10000 baht/month. (Table I)

Table II : Characteristics of disease(N= 80)

	no.	%
Main symptom when diagnosed		
Total	80	100.0
Lymphadenopathy	8	10.0
Oral fungus	7	8.8
Weight loss	24	30.0
Chronic fever	27	33.8
Diarrhea	6	7.5
Others	8	10.0
Duration of disease (years)		
1-5	48	60.0
6-10	24	30.0
11-15	6	7.5
16-20	2	2.5

$\bar{x}$±SD. 5.5±3.8, range 1.0-20.0

	no.	%
Main present symptom		
None	53	66.2
Yes	27	33.7
- Lymphadenopathy	4	5.0
- Oral fungus	7	8.7
- Weight loss	3	3.7
- Chronic fever	5	6.2
- Diarrhea	4	5.0
- Other	4	5.0
Associated STD		
None	2	2.50
Yes	78	97.50
- Syphilis	65	81.3
- Gonorrhea	4	5.0
- Soft chancre	7	8.8
- Other	2	2.5

Most of male AIDS patients had chronic fever when they were diagnosis (33.8%) and 30% had weight loss.(Table II)

Most of male AIDS patients had duration of disease 1-5 years (60.0%) and 30% had disease of 6-10 years. (Table II)

Most of male AIDS patients had no symptom at present (66.2%) and 33.7% had some symptom. The most symptoms were oral fungus 8.7%, 6.2%chronic fever. (Table II)

Ninety-eight percent had associated sexually transmitted disease, mainly syphilis 81.3%.

Part II: Changes of sexual behavior

Table III: Changes of sexual among AIDS patient.

Sexual intercourse	Before/no.(%)(N=51)	After/no.(%)(N=42)	P-value[#]
With wife			
None	1(2.0)	12(28.6)	<0.001
Yes	50(98.0)	30(71.4)	
-Everyday	17(34.0)	1(3.3)	
- 2-6 times per week	16(32.0)	12(40.0)	
- Once a week	9(18.0)	10(33.3)	
- Once in 2 weeks or less	8(16.0)	7(23.3)	

Sexual intercourse	Before/no.(%)(N=80)	After/no.(%)(N=80)	P-value[#]
With girlfriend			
None	46(57.5)	70(87.5)	<0.001
Yes	34(42.5)	10(12.5)	
-Everyday	0(0.0)	0(0.0)	
-2-6 times per week	13(16.3)	2(2.5)	
- Once a week	10(12.5)	5(6.3)	
- Once in 2 weeks or less	11(13.8	3(3.8)	
With prostitute			
None	50(62.5)	67(83.8)	0.002
Yes	30(37.5)	13(16.3)	
-Everyday	0(0.0)	0(0.0)	
- 2-6 times per week	5(6.3)	2(2.5)	
- Once a week	5(6.3)	3(3.8)	
- Once in 2 weeks or less	20(25.0)	8(10.1)	

Sexual intercourse	Before/no.(%) (N=80)	After/no.(%)(N=80)	P-value#
With boyfriend			
None	71(88.8)	78(97.5)	0.016
Yes	9(11.3)	2(2.5)	
-Everyday	0(0.0)	0(0.0)	
- 2-6 times per week	5(6.3)	0(0.0)	
- Once a week	4(5.0)	2(2.5)	
- Once in 2 weeks or less	0(0.0)	0(0.0)	

McNemar's test

Before they were diagnosed to have AIDS, 62.5% of the patients have sexual intercourse with wives, the rate decreased to 37.5% after diagnosis. Frequency of sexual intercourse also decreased. Before diagnosis 21.3% had sexual intercourse with their wives everyday. After diagnosis only 1.3% had sexual intercourse everyday. The decrease had significance statistical difference. ($p<0.001$). (Table III)

Before they were diagnosed to have AIDS 42.5% of the patients have sexual intercourse with girlfriends, the rate decreased to 12.5% after diagnosis. Frequency of sexual intercourse also decreased. Before diagnosis 16.3% had sexual intercourse with their girlfriend 2-6 times per week. The rate decreased to 2.5% after diagnosis. The decrease had significance statistical difference ($p<0.05$). (Table III)

Before they were diagnosed to have AIDS 37.5% of the patients have sexual intercourse with prostitutes, the rate decreased to 16.3% after diagnosis. Frequency of sexual intercourse also decreased. Before diagnosed 25.0% had sexual intercourse with their prostitute once in 2 weeks or less. The rate decreased to 10.1% after diagnosis. The decrease had significance statistical difference ($p<0.05$). (Table III)

Before they were diagnosed to have AIDS 11.3% of the patients have sexual intercourse with boyfriend, the rate decreased to 2.5% after diagnosis. Frequency of sexual intercourse also decreased. Before diagnosed 6.3% had

sexual intercourse with their boyfriend 2-6 times per week. The rate decreased to 2.5% had sexual intercourse once a week after diagnosis. The decrease had significance statistical difference ($p<0.05$). (Table III)

Table IV: Use of condom

Use of condom	Before/no.(%)	After/no.(%)
With wife		
None	17(34.0)	4(13.4)
Yes	33(66.0)	26(86.6)
- Use every time	20(60.6)	24(92.3)
- Use some time	13(39.3)	2(7.6)
With girlfriend		
None	20(58.3)	2(20.0)
Yes	14(41.7)	8(80.0)
- Use every time	8(57.1)	7(87.5)
- Use some time	6(42.8)	1(12.5)
With prostitute		
None	11(36.7)	1(7.7)
Yes	19(63.3)	12(92.3)
- Use every time	5(26.3)	12(100.)
- Use some time	14(73.6)	0(0.0)
With boyfriend		
None	0(0.0)	0(0.0)
Yes	9(100.0)	2(100.0)
- Use every time	0(0.0)	2(100.0)
- Use some time	9(100.0)	0(0.0)

Before they were diagnosed to have AIDS 66.0% of the patients used condom when they had intercourse with their wives. The rate increased to 86.6% after diagnosis. Before diagnosed 60.6% of those who used condom every time and the rate increased to 92.3% after diagnosis. (Table IV)

Before they were diagnosed to have AIDS 41.7% of the patients used condom when they had intercourse with their girlfriends. The rate increased to 80.0% after diagnosis. Before diagnosed 57.1% of those who used condom every time the rate increased to 87.5% after diagnosis. (Table IV)

Before they were diagnosed to have AIDS 63.3% of the patients used condom when they had intercourse with their prostitutes. The rate increased to 92.3% after diagnosis Before diagnosed 26.3% of those who used condom of those who used condom every time the rate increased to 100.0% after diagnosis. (Table IV)

Before they were diagnosed to have AIDS 100.0% of the patients used condom when they had intercourse with their boyfriends. Before diagnosed 0.0% of those who used condom every time the rate increased to 100.0% after diagnosis. (Table IV)

Part III: Association between demographic factors and change sexual behavior

Table V

	Wife sexual behavior change		
Factor	Decrease	Same or Increase	P-value
Age(year)			
20-39	14(77.80)	4(22.20)	
40-59	20(64.50)	11(35.50)	0.332
Education			
High school or less	23(92.00)	2(8.00)	
Diploma or higher	11(45.80)	13(54.20)	<0.001
Marital status			
Married	25(62.50)	15(37.0)	
Widowed, Divorced, Separated	9(100.00)	0(0)	0.042*
Occupation			
Government official, State enterprise employee	10(52.60)	9(47.40)	
Merchant, Student, Private employee	24(80.00)	6(20.00)	0.043
Income (bath/month)			
0-10,000	14(87.50)	2(12.50)	
>10,001	20(60.60)	13(39.40)	0.097*

	Wife		
	sexual behavior change		
Factor	Decrease	Same or Increase	P-value
Main symptoms when diagnosed			
Lymphadenopathy			
- Yes	3(75.00)	1(25.00)	
- No	31(68.90)	14(31.10)	>0.500*
Oral fungus			
- Yes	3(75.00)	1(25.00)	
- No	31(68.90)	14(31.10)	>0.500*
Weight loss			
- Yes	5(45.50)	6(54.50)	
- No	29(76.30)	9(23.70)	0.069*
Chronic fever			
- Yes	13(68.40)	6(31.60)	
- No	21(70.00)	9(30.00)	0.907
Diarrhea			
- Yes	3(100.00)	0(0)	
- No	31(67.40)	15(32.60)	>0.500*
Sexually transmitted diseases			
- Yes	7(77.80)	2 (22.20)	
- No	27(67.50)	13(32.50)	>0.500*

* Fisher's Exact test

	Girlfriend or Prostitute or Boyfriend sexual behavior change		
Factor	Decrease	Same or Increase	P-value
Age(year)			
20-39	34(82.90)	7(17.10)	
40-59	23(82.10)	5(17.90)	>0.500*
Education			
High school or less	27 (79.40)	7(20.60)	
Diploma or higher	30(85.70)	5(14.30)	0.490
Marital status			
Single	26(89.70)	3(10.30)	
Married, Widowed, Divorced, Separated	31(77.50)	9(22.50)	0.189
Occupation			
Government official, State enterprise employee	25(88.00)	3(12.00)	
Merchant, Student, Private employee	35(79.50)	9(20.50)	>0.500*
Income (bath/month)			
0-10,000	12(80.00)	3(20.00)	
>10,001	45(83.30)	9(16.70)	>0.500*

	Girlfriend or Prostitute or Boyfriend sexual behavior change		
Factor	Decrease	Same or Increase	P-value
Main symptoms when diagnosed			
Lymphadenopathy			
- Yes	5(71.40)	2(28.60)	
- No	52(83.90)	10(16.10)	>0.500*
Oral fungus			
- Yes	5(83.30)	1(16.70)	
- No	52(82.50)	11(17.50)	>0.500*
Weight loss			
- Yes	18(85.70)	3(14.30)	
- No	39(81.30)	9(18.80)	>0.500*
Chronic fever			
- Yes	20(90.90)	2(9.10)	
- No	37(78.70)	10(21.30)	0.313*
Diarrhea			
- Yes	4(66.70)	2(33.33)	
- No	53(84.10)	10(15.90)	0.278*
Sexually transmitted diseases			
- Yes	10 (83.30)	2(16.70)	
- No	47(82.50)	10(17.50)	>0.500

* Fisher's Exact test

Factor which were significantly associated with wife were education ($p<0.001$). Patient who had education higher or less trend to have more decrease in sexual intercourse with wife.

Patients marital status was significance factor associated with changes of behavior sexual ($p< 0.05$). Patients who were widowed, divorce and separated were 100% in sexual intercourse.

Patients occupation was significance factor associated with changes of behavior sexual ($p< 0.05$). Patients who were merchant, student, private employee trend to have more decrease in sexual intercourse with wife.

Their was no significance factor associated with decrease in sexual intercourse with girlfriends, prostitutes, boyfriends.

CHAPTER V
DISCUSSION

The discussion of this study will be divided into two parts:

1. Research methodology
2. Result of the study

Part I

1. Research methodology

This research was an analytical research. The data was collected from the primary source i.e. male AIDS patients who were followed at a special clinic in Siriraj Hospital. The sample size was calculated from a formula in which the incidence of sexual intercourse from study of Chutima Promsorn (22)" was used. The sample size was thus appropriate for the study.

Self administered questionnaire was used to collected data which patients recalled their sexual activities. Recall bias may occurr from this process. However, as the confidentiality of research was assured, recall bias may be minimized. Before the interview patients were told about objectives of the study and was assured about confidentiality.

The research design was appropriate for the objectives as questionnaires are appropriate to study about sexual intercourse. The questionnaires were approved by the Ethical Commissions of Mahidol University and Siriraj Hospital in order to conform with the objectives of the study and was not offensive towards human right.

Part II

2. Result of the study

2.1 General characteristics

Most of the patient aged 30-39 years and were married. Minimum age of the patients was 24 years old and was still a college student. AIDS can occur among young age group. The study of Smith et.al. (27) on studied HIV among 80 Latino adolescents in two New England cities in year 1990 found that the frequency of sexual intercourse was 25.3 times per six month. Cheamphachathanakal C. (28) studied factors associated of prevention of AIDS among 100 students of technology college in 1994. The result showed that 33.1% of students had engaged in sexual activities. The youngest age to have first coitus was 13 years old. Partner of first coitus were the lovers(50%) and girlfriends(31.8%). The frequency of coitus was 19.55 times per year.

Most of the patients were diagnosed to have AIDS for 1-5 years(60%). There were 2 patients which were diagnosed to have AIDS for 16-20 years and were still doing well without symptoms. Although theoretically the AIDS patients died after the disease appeared for about 10 years, the study of Haohan J.(29) on sexual behavior and factor association with coitus among 100 AIDS patients in England in 1996, found 2% of patients were diagnosed of AIDS for 15 years. Since sexual activities occurred at a very young age, young AIDS patients can be found not surprisely.

2.2 Objective 1. To study changes in sexual behavior among AIDS male patients including frequency of sexual intercourse, sexual partner and use of condom

2.2.1 After they were diagnosed of AIDS, they had significantly decreased rate of sexual intercourse with their wives. This may be due to the fact that after diagnosis of AIDS their wives might be separated, divorced and dead. The study of Bunnell H. (30) found that among 150 male HIV patients in Uganda 1992 , only 30% of them had sexual intercourse with wife after the diagnosis. Eight percent were divorced, 5% were separated and 3% of wives were dead**.** In this study there was significantly different in rate of sexual intercourse with wife. This

confirmed the fact that they felt that sexual intercourse was a major route of AIDS transmission so they avoided sexual intercourse with their wives and they usually used condom. The study Kirungi K. (31) 40% of patients had sexual intercourse with wife after diagnosis of HIV. The study of Musinguzi S. (32) on the epidemiological characteristics of HIV infected immigrant marriage women in rural areas in Zhejiang province found that among 36 concordant-positive couples, 63.9% (23 cases) reported that they never used condom in marriage sexual behavior before being detected HIV positive. This revealed the significant factors of contract HIV was marriage sexual behavior. In conclusion, premarital unsafely sexual behavior, in-marriage sexual behavior without condom, delayed detection of HIV are risk factors for HIV infection and transmission.

The rate of sexual intercourse with girlfriends, prostitutes or boyfriends decreased significantly because they felt risky to have sexual intercourse with these people and that they could get more infection. The study Kirungi K. (31) found that HIV among 150 male patients in England 1996, 15% had sexual intercourse with prostitute, 12% had sexual intercourse with girlfriend and 2% with boyfriend. The study Asiimwe J. (33) found 9% decrease in casual sex in the past year.

2.2.2 The rate of condom use was also increased. Ninety to one hundred percent of them used condom every time of sexual intercourse after diagnosis. This indicated that the patients were aware of the severity of disease and its route of transmission. They wanted to prevent themselves from further infection and to prevent the transmission from themselves. The study of Asiimwe J. (33) AIDS patients in Germany 40% of men and 30% of women used condom more than before respectively.

Objective 2. To study associations between demographic factors and changes in sexual behavior.

The significant decrease in rate of sexual intercourse with wives was significantly associated with marital status. Patients who were divorced or separated or spouse dead significantly had lower rate of sexual intercourse than patients who were

still married. This mainly due to the separated family. The spouse may be dead or separated or divorced due to AIDS. This cause the decrease sexual intercourse with wives.

The decrease in rate of sexual intercourse with wives was significantly higher in groups of less education level i.e. in high school or less. This may be due to the level of knowledge about means to prevent transmission of AIDS through sexual intercourse. There are several methods including use of condom to prevent transmission via sexual intercourse. The patients who know less might be afraid of sexual intercourse and use abstinence as a major method of prevention. This patients who had less education might practice abstinence more then patients who had high education.

The significant factor of occupation associated with more decrease in sexual intercourse with wives might operate through education. Patients who were private employee, student or merchant usually had less educational level than patients who were government officials. Patients with less education might practice abstinence more often than patients with higher education because they know less about other methods of prevention of AIDS transmission.

CHAPTER VI
CONCLUSION

AIDS is unique in human history in its rapid spread, its extent and the depth of its impact. Since the first AIDS case was diagnosed in 1981, the world has struggled to come to grip with its extraordinary dimensions. Early efforts to mount an effective response were fragmented, piecemeal and vastly under resources. Few communities recognized the dangers ahead, and even fewer were able to mount an effective response. Now, more than 20 years later, 20 million people are dead and 37.8 million people(range: 34.6-42.3 million) worldwide are living with HIV. And still, AIDS expands relentlessly, destroying people's live and in many cases seriously damaging the fabric of societies.

This cross-sectional study was aimed at studying changes in sexual behavior among AIDS male patients who were followed up at a special outpatient clinic at Siriraj Hospital, Bangkok. Data were collected from 80 patients by self administered questionnaires between 1 November 2008 and 31 December 2009. Descriptive statistics used in this study were percentages, means and standard deviations. Analytical statistics including the Chi-square test, Fisher's Exact test and McNemar's test were also used.

Most of the patients were aged 30-39 years (50.0%), married (52.5%), were employees (58.9%), had average monthly incomes of 10,001 to 20,000 baht (63.8%), and had finished high school (51.3%). The most important symptom when they were first diagnosed was chronic fever (33.8%). Duration of disease was 1-5 years (60.0%). At present most of them have no symptoms (66.2%).

After they were diagnosed with AIDS, they had decreased rate of sexual intercourse with wives, girlfriends, prostitutes and boyfriends. They had insignificantly decreased their rate of sexual intercourse with their wives. However, they had significantly reduced their rate of sexual intercourse with girlfriends, prostitutes or boyfriends ($p<0.05$). Condom use was also increased. Ninety to one

hundred percent of them used condoms every time they had sexual intercourse after diagnosis. Factors which were significantly associated with a decrease in sexual intercourse with wives were education ($p<0.001$), occupation ($p< 0.05$) and marital status ($p< 0.05$).

Recommendations for future application

1. Support and encourage better sexual behavior among male AIDS patients.
2. Set up education program to fulfill information need for these patients.

Recommendations for future research

1. Changes in family structure of AIDS patients.
2. Family participation in caring AIDS patients.
3. Association between education method of practice of AIDS

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APPENDIX

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Siriraj Ethics Committee

Certificate of Approval

COA no.Si 468/2008

Protocol Title : Changes in Sexual Behavior Among AIDS Patients.

SiEC number : 019/2551(EC1)

Principal Investigator/Affiliation: Miss Nualnapa Kasemvilawan / Department of Medicine
Faculty of Medicine Siriraj Hospital, Mahidol University

Research site : Faculty of Medicine Siriraj Hospital

Approval includes :

1. EC Submission Form
2. Proposal
3. Participant Information Sheet
4. Informed Consent Form
5. Questionnaire

Approval date : September 5, 2008

Expired date : September 4, 2009

This is to certify that Siriraj Ethics Committee is in full Compliance with International Guidelines For Human Research Protection such as the Declaration of Helsinki, the Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP).

Prof. Jariya Lertakyamanee, M.D.
Chairperson

September 9, 2008
date

T. Kulthanan

(Clin. Prof. Teerawat Kulthanan, M.D.)
Dean of Faculty of Medicine Siriraj Hospital

September 10, 2008
date

All Siriraj Ethics Committee Approved Investigators must comply with the Following :

1. Conduct the research as required by the Protocol ;
2. Use only the Consent Form bearing the Siriraj Ethics Committee "APPROVED" stamp ;
3. Report to Siriraj Ethics Committee all of serious illness of any study subject ;
4. Promptly report to Siriraj Ethics Committee any new information that may adversely affect the safety of the subjects or the conduct of the trial ;
5. Provide reports to Siriraj Ethics Committee concerning the progress of the research, when requested ;
6. Conduct the informed consent process without coercion or undue influence, and provide the potential subject sufficient opportunity to consider whether or not to participate.

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Documentary Proof of Ethical Clearance Committee on Human Rights Related to Researches Involving Human Subjects Faculty of Medicine, Ramathibodi Hospital, Mahidol University

MURA2007/046

Title of Project	Changes in Sexual Behavior Among Aids Patients
Protocol Number	ID 02-50-04
Principal Investigator	Rujira Wattanayingcharoenchai, M.D.
Official Address	Department of Obstetrics and Gynecology Faculty of Medicine, Ramathibodi Hospital Mahidol University

The aforementioned project has been reviewed and approved by Committee on Human Rights Related to Researches Involving Human Subjects, based on the Declaration of Helsinki.

Signature of Secretary Committee on Human Rights Related to Researches Involving Human Subjects .....
Assoc. Prof. Duangrurdee Wattanasirichaigoon, M.D.

Signature of Chairman Committee on Human Rights Related to Researches Involving Human Subjects .....
Prof. Boonsong Ongphiphadhanakul, M.D.

Date of Approval February 16, 2007

แบบสอบถาม การเปลี่ยนแปลงพฤติกรรมทางเพศของผู้ป่วยโรคเอดส์ชาย

คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี

เรื่อง ขอความร่วมมือในการตอบแบบสอบถาม
เรียน ท่านผู้ตอบแบบสอบถาม

เนื่องด้วยข้าพเจ้า น.ส. นวลนภา เกษมวิลาวัณย์ นักศึกษาหลักสูตรวิทยาศาสตรมหาบัณฑิต คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี กำลังทำวิทยานิพนธ์เรื่อง การเปลี่ยนแปลงพฤติกรรมทางเพศของผู้ป่วยโรคเอดส์ชาย ในโรงพยาบาลศิริราช ท่านเป็นบุคคลสำคัญยิ่งในการให้ข้อมูลครั้งนี้ จึงขอความร่วมมือในการตอบแบบสอบถามคำตอบที่ได้ผู้วิจัยจะเก็บเป็นความลับ และจะไม่มีผลต่อผู้ป่วยทั้งทางตรงและทางอ้อม แต่จะสรุปผลการศึกษาที่เป็นประโยชน์ต่อส่วนรวม

ผู้วิจัยขอขอบคุณผู้ป่วยทุกท่านที่ให้ความร่วมมือในการตอบแบบสอบถาม ณ ที่นี้ด้วย

นวลนภา เกษมวิลาวัณย์
นักศึกษาปริญญาโท สาขาการเจริญพันธ์และวางแผนประชากร
มหาวิทยาลัยมหิดล

การเปลี่ยนแปลงพฤติกรรมทางเพศของผู้ป่วยโรคเอดส์ชาย

1. ข้อมูลทั่วไปในปัจจุบัน

1.1 ท่านอายุ…..ปี.....เดือน

1.2 ท่านจบการศึกษาระดับชั้น……

1.3 ท่านประกอบอาชีพ

- ☐ 1. รับราชการ
- ☐ 2.พนักงานเอกชน
- ☐ 3.พนักงานรัฐวิสาหกิจ
- ☐ 4.ประกอบธุรกิจส่วนตัว/ค้าขาย
- ☐ 5.แม่บ้าน
- ☐ 6.นักศึกษา
- ☐ 7.รับจ้างทั่วไป
- ☐ 8.อื่นๆ

1.4 ท่านมีรายได้เฉลี่ย……ต่อเดือน (บาท)

1.5 สถานภาพสมรสในปัจจุบัน

- ☐ 1. โสด
- ☐ 2. สมรส
- ☐ 3. หม้าย
- ☐ 4. หย่า
- ☐ 5. แยก

1.6 สถานที่พักอาศัยในปัจจุบัน

- ☐ 1. บ้าน
- ☐ 2. บ้านเช่า
- ☐ 3. อพาทเมนต์
- ☐ 4. แมนชั่น
- ☐ 5. วัด
- ☐ 6. อื่นๆโปรดระบุ

2. พฤติกรรมทางเพศ**ก่อนทราบว่าเป็นโรคเอดส์**

การมีเพศสัมพันธ์

--ท่านมีเพศสัมพันธ์กับใครบ้างก่อนทราบว่าเป็นโรคเอดส์

☐ 1. ภรรยา

☐ 1.1 มี

☐ 1.2 ไม่มี (ถ้าไม่มีให้ไปตอบข้อ 2. เพื่อนชาย)

--ท่านมีเพศสัมพันธ์กับภรรยาบ่อยครั้งเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ก่อนทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์
☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้
☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

-- ท่านมีเพศสัมพันธ์กับใครบ้างก่อนทราบว่าเป็นโรคเอดส์

☐ 2. เพื่อนชาย

☐ 2.1 มี

☐ 2.2 ไม่มี (ถ้าไม่มีให้ไปตอบข้อ 3. เพื่อนหญิง)

--ท่านมีเพศสัมพันธ์กับเพื่อนชายบ่อยครั้งเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3 สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ก่อนทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์
☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้
☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

--ท่านมีเพศสัมพันธ์กับใครบ้างก่อนทราบว่าเป็นโรคเอดส์

☐ 3. เพื่อนหญิง

☐ 3.1 มี

☐ 3.2 ไม่มี (ถ้าไม่มีให้ไปตอบข้อ 3.หญิงโสเภณี)

--ท่านมีเพศสัมพันธ์กับเพื่อนหญิงบ่อยครั้งเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ก่อนทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์

☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์

☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้

☐ 4. ไม่รู้จักวิธีการคุมกำเนิด

☐ 5. อื่นๆ ระบุ.....

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย

☐ 2. หลั่งภายนอก

☐ 3. ยาเม็ดคุมกำเนิด

☐ 4. สวนล้างช่องคลอด

☐ 5. อื่นๆ ระบุ.....

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง

☐ 2. ใส่บางครั้ง จำนวน..... ครั้ง

☐ 3. ไม่เคยใส่เลย

☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด.....

-- ท่านมีเพศสัมพันธ์กับใครบ้างก่อนทราบว่าเป็นโรคเอดส์

☐ 4. หญิงโสเภณี

☐ 4.1 มี

☐ 4.2 ไม่มี(ถ้าไม่มีให้ไปตอบข้อ 5.คนไม่รู้จักที่ยินยอม)

--ท่านมีเพศสัมพันธ์กับหญิงโสเภณีบ่อยครั้งเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ก่อนทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์
☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้
☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

--ท่านมีเพศสัมพันธ์กับใครบ้างก่อนทราบว่าเป็นโรคเอดส์

☐ 5. คนไม่รู้จักที่ยินยอม

☐ 5.1 มี

☐ 5.2 ไม่มี

--ท่านมีเพศสัมพันธ์กับคนไม่รู้จักที่ยินยอมบ่อยครั้งเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ก่อนทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

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--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
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☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

3. ลักษณะของโรค

3.1 อาการที่ทำให้ท่านมาพบแพทย์

☐ 1. ต่อมน้ำเหลืองโต
☐ 2. ลิ้นเป็นฝ้า
☐ 3. น้ำหนักลด
☐ 4. ไข้เรื้อรัง
☐ 5. ท้องเสีย
☐ 6. อื่นๆ โปรดระบุ……..

3.2 ท่านทราบว่าเป็นโรคเอดส์เมื่ออายุเท่าใด…….ปี

3.3 ท่านคิดว่าท่านติดเชื้อโรคเอดส์จากอะไร

☐ 1. เพศสัมพันธ์
☐ 2. การใช้เข็มฉีดยาร่วมกัน
☐ 3. การได้รับเลือด
☐ 4. เป็นผู้รับการเปลี่ยนอวัยวะจากผู้อื่น
☐ 5. อื่นๆ โปรดระบุ……

3.4 ช่วงนี้มีอาการของโรคหรือไม่ อย่างไร โปรดระบุ

☐ 1. ไม่มีอาการ
☐ 2. มีอาการดังนี้ ตอบได้มากกว่า 1 ข้อ
  ☐ 2.1. ต่อมน้ำเหลืองโต
  ☐ 2.2. ลิ้นเป็นฝ้า
  ☐ 2.3. น้ำหนักลด
  ☐ 2.4. ไข้เรื้อรัง
  ☐ 2.5. ท้องเสีย
  ☐ 2.6. ติดเชื้อระบบต่างๆ
  ☐ 2.7 มะเร็งในหลอดเลือด/ต่อมน้ำเหลือง
  ☐ 2.8 อื่นๆ

3.5 ในปัจจุบันท่านเป็นโรคติดต่อทางเพศสัมพันธ์

☐ 1. ไม่เคยเป็น

☐ 2. ซิฟิลิส

☐ 3. หนองใน

☐ 4. แผลริมอ่อน

☐ 5. ฝีมะม่วง

☐ 6. หนองในเทียม

☐ 7. โรคติดต่อทางเพศสัมพันธ์อื่นๆ โปรดระบุ…….

☐ 8. ไม่ทราบ

4.ปัจจุบันท่านมีการดูแลรักษาเกี่ยวกับโรคเอดส์

การรับประทานยา

☐ 1.รับประทานยาตามแพทย์สั่งทุกมื้อ

☐ 2.รับประทานยาตามแพทย์สั่งบางมื้อ

☐ 3.ไม่รับประทานยา

มาตรวจตามนัด

☐ 1.มาตรวจทุกครั้ง

☐ 2.มาตรวจบางครั้ง

5. พฤติกรรมทางเพศ**<u>หลังทราบว่าเป็นโรคเอดส์</u>**

<u>การมีเพศสัมพันธ์</u>

--ท่านมีเพศสัมพันธ์กับใครบ้างหลังทราบว่าเป็นโรคเอดส์

☐ 1. ภรรยา

☐ 1.1 มี

☐ 1.2 ไม่มี (ถ้าไม่มีให้ไปตอบข้อ 2. เพื่อนชาย)

--ท่านมีเพศสัมพันธ์กับภรรยาบ่อยเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--หลังทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์
☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้
☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

-- ท่านมีเพศสัมพันธ์กับใครบ้างหลังทราบว่าเป็นโรคเอดส์

☐ 2. เพื่อนชาย

☐ 2.1 มี

☐ 2.2 ไม่มี (ถ้าไม่มีให้ไปตอบข้อ 3. เพื่อนหญิง)

--ท่านมีเพศสัมพันธ์กับเพื่อนชายบ่อยเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3 สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--หลังทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์
☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้
☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

--ท่านมีเพศสัมพันธ์กับใครบ้างหลังทราบว่าเป็นโรคเอดส์

☐ 3. เพื่อนหญิง

☐ 3.1 มี

☐ 3.2 ไม่มี (ถ้าไม่มีให้ไปตอบข้อ 3.หญิงโสเภณี)

--ท่านมีเพศสัมพันธ์กับเพื่อนหญิงบ่อยเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--หลังทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์

☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์

☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้

☐ 4. ไม่รู้จักวิธีการคุมกำเนิด

☐ 5. อื่นๆ ระบุ.....

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย

☐ 2. หลั่งภายนอก

☐ 3. ยาเม็ดคุมกำเนิด

☐ 4. สวนล้างช่องคลอด

☐ 5. อื่นๆ ระบุ.....

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง

☐ 2. ใส่บางครั้ง จำนวน..... ครั้ง

☐ 3. ไม่เคยใส่เลย

☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด.....

-- ท่านมีเพศสัมพันธ์กับใครบ้างหลังทราบว่าเป็นโรคเอดส์

☐ 4. หญิงโสเภณี

☐ 4.1 มี

☐ 4.2 ไม่มี(ถ้าไม่มีให้ไปตอบข้อ 5.คนไม่รู้จักที่ยินยอม)

--ท่านมีเพศสัมพันธ์กับหญิงโสเภณีบ่อยเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--หลังทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์
☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์
☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้
☐ 4. ไม่รู้จักวิธีการคุมกำเนิด
☐ 5. อื่นๆ ระบุ…..

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย
☐ 2. หลั่งภายนอก
☐ 3. ยาเม็ดคุมกำเนิด
☐ 4. สวนล้างช่องคลอด
☐ 5. อื่นๆ ระบุ…..

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง
☐ 2. ใส่บางครั้ง จำนวน….. ครั้ง
☐ 3. ไม่เคยใส่เลย
☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด……

--ท่านมีเพศสัมพันธ์กับใครบ้างหลังทราบว่าเป็นโรคเอดส์

☐ 5. คนไม่รู้จักที่ยินยอม

☐ 5.1 มี

☐ 5.2 ไม่มี

--ท่านมีเพศสัมพันธ์กับคนไม่รู้จักที่ยินยอมบ่อยเพียงใด

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--หลังทราบว่าเป็นโรคเอดส์ท่านสำเร็จความใคร่ด้วยตนเองหรือไม่ บ่อยแค่ไหน

☐ 1. ไม่มี

☐ 2. ทุกวัน

☐ 3. สัปดาห์ละมากกว่า 2-4 ครั้ง

☐ 4. สัปดาห์ละ 1 ครั้ง

☐ 5. เดือนละ 1 ครั้ง

☐ 6. 3 เดือน 1 ครั้ง

☐ 7. มากกว่า 3 เดือน 1 ครั้ง

--ท่านมีการป้องกันการติดเชื้อทางเพศสัมพันธ์หรือคุมกำเนิดหรือไม่

☐ 1. ไม่มี

☐ 2. มีบ้างเป็นบางครั้ง

☐ 3. มี

--ท่านมีเหตุผลที่ไม่ใช้การคุมกำเนิดขณะมีเพศสัมพันธ์อย่างไร

☐ 1. คิดว่าเป็นช่วงที่ปลอดภัยไม่ทำให้ตั้งครรภ์

☐ 2. ไม่คิดว่าจะมีเพศสัมพันธ์

☐ 3. ไม่ได้เตรียมอุปกรณ์เอาไว้

☐ 4. ไม่รู้จักวิธีการคุมกำเนิด

☐ 5. อื่นๆ ระบุ.....

--วิธีการคุมกำเนิดที่ท่านใช้เป็นส่วนใหญ่ในขณะมีเพศสัมพันธ์ คือ

☐ 1. ถุงยางอนามัย

☐ 2. หลั่งภายนอก

☐ 3. ยาเม็ดคุมกำเนิด

☐ 4. สวนล้างช่องคลอด

☐ 5. อื่นๆ ระบุ.....

--ท่านใส่ถุงยางอนามัยขณะมีเพศสัมพันธ์ บ่อยแค่ไหน เพราะเหตุใด

☐ 1. ใส่ทุกครั้ง

☐ 2. ใส่บางครั้ง จำนวน..... ครั้ง

☐ 3. ไม่เคยใส่เลย

☐ 4. จำไม่ได้/ไม่แน่ใจ

เพราะเหตุใด.....

BIOGRAPHY

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