Sexual behaviors reported by a sample of human immunodeficiency virus-positive men who have sex with men: A descriptive study in Khon Kaen, Thailand

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Abstract

Context: In Thailand, men who have sex with men (MSM) have a far higher rate of human immunodeficiency virus (HIV) infections. If these persons do not modify their behavior to safer lifestyles, they may increase the spread of HIV infection. Aims: This study aims to identify the behavior of HIV-positive MSM in comparison to their prediagnostic behaviors. Settings and Design: We conducted a cross-sectional study involving antiretroviral clinic (ARV) in Khon Kaen hospital to explore the sexual behaviors of HIV-positive MSM after the diagnosis of HIV infection. Subjects and Methods: HIV-positive MSM aged ≥18 years were asked to enroll in the study. The questionnaire was administered to 114 MSM at least 3 months after HIV diagnosis. Statistical Analysis Used: Descriptive statistics was used including means, frequencies, and percentage. Results: Forty percent of HIV-positive MSM had not have sex with a man during the 12 months. Nineteen participants reported unprotected sex, 4.31% and 12.28% reported engaging in unprotected anal and oral intercourse, respectively. About 16.6% reported that they had practiced at-risk sexual behavior. The mean of number of partners in the past 3 months was 1.8. In total, 32.46% (n = 37) reported that they had relationships with a stable partner, while 22.80% (n = 26) indicated they continued relationships with casual partners. Conclusions: Our sample of HIV-positive MSM, though aware of being infected, engage in sexual behaviors that could sustain transmission of HIV and other sexually transmitted infections. This highlights the need for a national prevention programs for persons living with HIV.

Key words: Behavior, human immunodeficiency virus, men who have sex with men

INTRODUCTION

The epidemic of acquired immune deficiency syndrome (AIDS) in Thailand has been shown to be driven primarily by patterns of heterosexual behavior.[1] Several factors had led to a resurgence in human immunodeficiency virus (HIV)/AIDS in Thailand. Awareness of HIV status is low. For instance, 80 percent of HIV-positive men who have sex with men (MSM) have never been blood tested or thought they were HIV negative.[2] MSM have a far higher rate of HIV infections compared to the general population.[3] If these persons do not appropriately modify their lifestyles (e.g., consistent condom use with all partners), they may increase the spread of HIV infection.

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The advance of new antiretroviral regimens has led to a dramatic increase in the number of persons living with HIV, who constitute one of the most important components in the evolution of the epidemic. The results of various studies indicate that many seropositive MSM continue to practice at-risk behavior, and awareness of HIV-positive individuals does not always interpret as safer sexual behavior.\[4,5\] According to a previous study, between 13% and 51% of HIV-infected MSM proceed to engage in risky sexual behavior even after perceiving their positive serostatus.\[6\] Moreover, up to 15% of cases of HIV transmission occur with MSM who are aware of their positive serostatus,\[7\] and between 20-33% of MSM who perceived their positive serostatus still practiced risky sexual behavior.\[8,9\] The objective of this study was to identify the behavior of HIV-positive MSM after the diagnosis of HIV infection in comparison to their prediagnostic behaviors to identify possible behavioral changes.

**RESULTS**

Table 1 outlines the demographics and behavioral characteristics of the study sample. During the 1 year of the study period, 114 HIV-positive MSM agreed to participate. Mean age was 34.2 years and mean duration of diagnosed HIV infection was 2.5 years. All of participants were on antiretroviral therapy (ART) and approximately 65% were employed. The findings in this study indicated that approximately 40% of HIV-positive MSM had not have sex with a man (i.e., were abstinent or had sexual with women) during the 12 months preceding the interview. About 16.6% reported that they had practiced at-risk sexual behavior and the mean of number of partners in the past 3 months was 1.8. In total, 32.46% (n = 37) of the participants reported that they had relationships with a stable partner, while 22.80% (n = 26) indicated they continued relationships with casual partners.

At their most recent sexual encounter, condom use for insertive anal intercourse was significantly higher than oral intercourse. There were 19 participants who reported unprotected sex, 4.31% and 12.28% reported engaging in unprotected anal and oral intercourse, respectively. For other sexual behaviors, 31 participants (27.19%) reported paying for sex, and 24 participants (21.05%) were paid for sex. None of participants were injecting drug users or transfusion recipients, but 8 participants (7%) reported using illegal drug before sex. In terms of recent sexually transmitted diseases (STDs) (previous 3 months), participants reported their history of STDs including GC (26.99%), genital wart (22.22%), syphilis (11.11%), and herpes (3.17%). On the other hand, 8.7% reported knowledge about their partner’s history of STDs.

**DISCUSSION**

In this study, we demonstrated the rates of continuing practicing at-risk sexual behavior of HIV positive among MSM in Khon Kaen, Thailand. The number of sexual partners plays a critical role in the spread of HIV infection. On average, we observed most MSM had relatively few sexual partners. Nonetheless, one-third of the participants reported that they had more than 5 sexual partners. The survey on health and risky behaviors of MSM in Bangkok showed that 36.5% of respondents (with HIV-positive) claimed to have had more than 5 partners in the previous 3 months.\[10\] The assessment of sexual behavior showed high rate (56.14%) of 100% condom use both with stable partners and casual ones. This result is congruent with previous study in Italy,\[11\] that
demonstrated a general increase in condom use both with stable partners and occasional ones after HIV diagnosis. However, findings from studies in the United States indicated that unprotected anal sex among those who had a stable partner was more frequent than unprotected oral sex.

The results of the present study indicated that the percentage of HIV-positive MSM who engaged in at-risk sexual behavior despite they being infected by an STI other than HIV was high. In fact, MSM who had sex in the presence of a genital infection did not use a condom with unknown STI status of their partners. It might be because these individuals are less concerned with the role of STIs in promoting the spread of HIV infection. The incidence rate of STIs in HIV-positive MSM observed is higher associated with an increase in at-risk sexual behaviors.

The percentage of individuals paying or paid for sex was high in our study. This result is consistent with the findings of a previous study, which indicated that behaviors related to commercial sex are the most difficult to alter, regardless of increased awareness of HIV-seropositive individuals. The motives for which HIV-positive MSM continue to practice at-risk sexual behaviors are not clear. However, there are many strategies that can be employed to change behaviors including personal counseling the benefits of condom use, disclosure of their HIV status with their partners, and promotion of stable partner relationships.

CONCLUSIONS
The present study demonstrates that our sample of Thai HIV-positive MSM still practice at-risk sexual behaviors that could lead to higher transmission males of HIV and other STDs. The findings show having multiple partners, inconsistent condom use during anal and oral sex, alcohol or illegal drug use before sex, and making or receiving payment or were paid for sex are major risky sexual behaviors in this population. Public health policies such as national prevention programs for persons living with HIV and for the rest of the community should be developed with this high prevalence of at-risk behavior improved. In addition, health-care providers could perform an important role in improving the awareness of safer sex among HIV-positive MSM through individual counseling provided during routine clinical encounters and follow-up.

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| Demographic and sexual behavior data (n=114) |
|--------------------------------------------|
| **Demographics**                           |
| **HIV (+ve)**                              |
| **Age (years), n (%)**                     |
| 18-24                                      |
| 22 (19.30)                                 |
| >24                                        |
| 92 (80.70)                                 |
| **Occupation, n (%)**                      |
| Unemployed                                 |
| 37 (32.46)                                 |
| Employed                                   |
| 73 (64.04)                                 |
| College/university students                |
| 4 (3.51)                                   |
| **Years since HIV diagnosis, n (%)**       |
| 0-1 year                                   |
| 72 (63.16)                                 |
| 2-4 years                                  |
| 35 (30.70)                                 |
| 5 or more years                            |
| 7 (6.14)                                   |
| **Sexual identity and behavior**           |
| **Sexual identity, n (%)**                 |
| Male (king)                                |
| 16 (14.04)                                 |
| Bisexual (queen)                           |
| 28 (24.56)                                 |
| Others                                     |
| 70 (61.40)                                 |
| Transgender                                |
| 29 (26.04)                                 |
| Uncertain of sexuality                     |
| 41 (58.57)                                 |
| **Number of male sexual partners in the past 3 months, n (%)** |
| 0                                          |
| 51 (44.74)                                 |
| 1                                          |
| 37 (32.46)                                 |
| >1                                         |
| 26 (22.80)                                 |
| **Having stable partner**                  |
| Yes                                        |
| 42 (36.84)                                 |
| No                                         |
| 72 (63.16)                                 |
| **Having casual partner**                  |
| Yes                                        |
| 26 (22.80)                                 |
| No                                         |
| 88 (77.19)                                 |
| **Sexual route of last encounter**         |
| Protect sex                                |
| 64 (56.14)                                 |
| Unprotect sex                              |
| 19 (16.67)                                 |
| Anal                                       |
| 5 (4.31)                                   |
| Oral                                       |
| 14 (12.28)                                 |
| **Condom use, n (%)**                      |
| Abstinent (no have sex)                    |
| 31 (27.19)                                 |
| 100% use                                   |
| 64 (56.14)                                 |
| Unprotected (usually/sometimes)            |
| 19 (16.67)                                 |
| **Other sexual behaviors, n (%)**          |
| Payment for sex                            |
| 31 (27.19)                                 |
| Receipt for sex                            |
| 24 (21.05)                                 |
| Nonsexual behavior risk, n (%)             |
| Alcohol use before sex                     |
| 39 (34.21)                                 |
| Illegal drugs use before sex               |
| 8 (7.02)                                   |
| **History of STIs, n (%)**                 |
| GC                                         |
| 17 (26.99)                                 |
| Genital wart                               |
| 14 (22.22)                                 |
| Syphilis                                   |
| 7 (11.11)                                  |
| Herpes                                     |
| 2 (3.17)                                   |
| **History of partners STIs, n (%)**        |
| Unknown                                    |
| 104 (91.23)                                |
| Yes                                        |
| 10 (8.77)                                  |
| Syphilis                                   |
| 5 (50.00)                                  |
| HIV                                        |
| 4 (40.00)                                  |
| GC                                         |
| 1 (10.00)                                  |

STDs=Sexually transmitted diseases; HIV=Human immunodeficiency virus; GC=Germinal centers
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Conflicts of interest
There are no conflicts of interest.

Note
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