

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

Jiratha Budkaew, Bandit Chumworathayi¹, Chamsai Peintong², Tipaya Ekalaksananan
 Department of Social Medicine, Khon Kaen Center Hospital, ¹Department of Obstetrics and Gynecology, Faculty of Medicine, Srinagarind Hospital, Khon Kaen University, ²Department of Microbiology, Faculty of Medicine, Srinagarind Hospital, Khon Kaen University, Khon Kaen, Thailand

Address for correspondence:

Dr. Jiratha Budkaew, Department of Social Medicine, Khon Kaen Hospital, 54-56 Sri Chan, Naimuang, Muang, Khon Kaen 40000, Thailand. E-mail: jbudkaew@gmail.com

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.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Budkaew J, Chumworathayi B, Peintong C, Ekalaksananan T. Sexual behaviors reported by a sample of human immunodeficiency virus-positive men who have sex with men: A descriptive study in Khon Kaen, Thailand. *Indian J Sex Transm Dis* 2018;39:34-7.

Access this article online

Quick Response Code:



Website:

www.ijstd.org

DOI:

10.4103/ijstd.IJSTD_5_17

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.

SUBJECTS AND METHODS

In 2014, we conducted a cross-sectional study involving one ARV in Khon Kaen Hospital. 114 HIV-positive MSM aged ≥ 18 years diagnosed HIV-positive at least 3 months before the research were asked to enroll the study. An anonymous, specifically designed questionnaire was used to collect the following data: sociodemographic and clinical data; information on drug-using behavior (substances used in lifetime, injecting use, syringe exchange); information on sexual behavior (age at first sexual experience, number of sexual partners in lifetime, sexual orientation, sexual intercourse for money or were paid for sexual intercourse, condom use during anal/oral intercourse with stable or occasional partner); and sexual intercourse in the presence of sexually transmitted infections (STIs) other than HIV. Verbal informed consent was obtained from all study participants and the study was approved by the Ethics Committee of Human Research, Khon Kaen University and Ethics Committee of Human Research, Khon Kaen hospital.

Data from questionnaire were entered into a secure database. Individual and composite data were obtained for routine accuracy checks by researchers and periodic review by study monitors. Data cleaning, recoding, and analysis were performed using Stata (V11; Stata Corp, College Station, Texas, USA). We summarized the baseline demographics and behaviors profile using descriptive statistics, including medians, means, frequencies, and percentage.

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

Table 1: 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 (41.43)
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 STDs, n (%)	
GC	17 (26.99)
Genital wart	14 (22.22)
Syphilis	7 (11.11)
Herpes	2 (3.17)
History of partners STDs, 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

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^[12] 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.^[13-15]

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.^[16] 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 rates 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.

Acknowledgment

The authors wish to express their gratitude to Dr. Kaewjai Thepsuthammarat to help for the

biostatistics and Dr. Cameron P Hurst for assistance with the English language presentation of the manuscript. The authors would also like to convey thanks to the Social Medicine Department, Khon Kaen Center Hospital for supporting this work. Finally, the authors wish to thank the Royal Golden Jubilee Ph. D Program for providing the financial support and M-REACH STD clinic for giving other facilities to perform this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Note

This study has been a part of the doctoral thesis entitled “Prevalence and factors associated with Neisseria gonorrhoea infection with respect to anatomic distributions among men who have sex with men” submitted to Khon Kaen University in 2016 by Budkaew J. The Royal Golden Jubilee Ph. D. Program (RGJPHD) provided financial support to this study.

REFERENCES

- Phanuphak P, Lochareernkul C, Panmuong W, Wilde H. A report of three cases of AIDS in Thailand. *Asian Pac J Allergy Immunol* 1985;3:195-9.
- UNAIDS (the Joint United Nations Program on HIV/AIDS); 2006. Available from: http://data.unaids.org/pub/report/2006/2006_gr_en.pdf. [Last accessed on 2015 Jan 25].
- UNDP (United Nations Development Program), The Country Snapshots; Thailand; 2012. Available from: http://www.asia-pacific.undp.org/content/rbap/en/home/library/democratic_governance/hiv_aids/msm-country-snapshots.html. [Last accessed on 2015 Jan 27].
- Browning MR, Evans MR, Rees CM. Continued high-risk sexual behaviour among HIV-positive people in Wales. *Int J STD AIDS* 2003;14:737-9.
- Camoni L, Regine V, Colucci A, Conte ID, Chiriotto M, Vullo V, *et al.* Changes in at-risk behavior for HIV infection among HIV-positive persons in Italy. *AIDS Patient Care STDS* 2009;23:853-8.
- van Kesteren NM, Hospers HJ, Kok G. Sexual risk behavior among HIV-positive men who have sex with men: A literature review. *Patient Educ Couns* 2007;65:5-20.
- Marks G, Crepaz N, Senterfitt JW, Janssen RS. Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the United States: Implications for HIV prevention programs. *J Acquir Immune Defic Syndr* 2005;39:446-53.
- Janssen RS, Holtgrave DR, Valdiserri RO, Shepherd M, Gayle HD, De Cock KM, *et al.* The serostatus approach to fighting the HIV epidemic: Prevention strategies for infected individuals. *Am J Public Health* 2001;91:1019-24.
- Kalichman SC, Greenberg J, Abel GG. HIV-seropositive men who engage in high-risk sexual behaviour: Psychological characteristics and implications for prevention. *AIDS Care* 1997;9:441-50.
- Edwards-Jackson N, Phanuphak N, Van Tieu H, Chomchey N, Teeratakulpisarn N, Sathienthammawit W, *et al.* HIV serostatus disclosure is not associated with safer sexual behavior among HIV-positive men who have sex with men (MSM) and their partners at risk for infection in Bangkok, Thailand. *AIDS Res Ther* 2012;9:38.
- Camoni L, Dal Conte I, Regine V, Colucci A, Chiriotto M, Vullo V, *et al.* Sexual behaviour reported by a sample of Italian MSM before and after HIV diagnosis. *Ann Ist Super Sanita* 2011;47:214-9.
- Crepaz N, Marks G, Liau A, Mullins MM, Aupont LW, Marshall KJ, *et al.* Prevalence of unprotected anal intercourse among HIV-diagnosed MSM in the United States: A meta-analysis. *AIDS* 2009;23:1617-29.
- van de Laar MJ. HIV/AIDS and other STI in men who have sex with men – A continuous challenge for public health. *Euro Surveill* 2009;14. pii:19423.
- Macdonald N, Elam G, Hickson F, Imrie J, McGarrigle CA, Fenton KA, *et al.* Factors associated with HIV seroconversion in gay men in England at the start of the 21st century. *Sex Transm Infect* 2008;84:8-13.
- Elford J, Jeannin A, Spencer B, Gervasoni JP, van de Laar MJ, Dubois-Arber F, *et al.* HIV and STI behavioural surveillance among men who have sex with men in Europe. *Euro Surveill* 2009;14. pii: 19414.
- Kalichman SC. Psychological and social correlates of high-risk sexual behaviour among men and women living with HIV/AIDS. *AIDS Care* 1999;11:415-27.