

# RISK BEHAVIORS AND ACCESSING TO HIV/AIDS PREVENTION SERVICES AMONG MEN WHO HAVE SEX WITH MEN IN HO CHI MINH CITY, 2015

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## ABSTRACT

*With the purpose of finding out HIV transmission risk behaviors as well as the rate of accessing to HIV prevention services among MSM in HCMC. The study was implemented with 400 MSM in HCMC, who had sex at least one time in 6 months before joining the study. The study results shows that the average age of MSM is 25.1 years old (18-48), 65% of MSM has colleges degree and higher, 62.8% of MSM has full-time job and average income per month is 5 million vnd (1-40). The risk behaviors in last 12 months: 16.5% of them is MSM sex worker, 60.2% of MSM did not use condom in regularly when having sex, 6.3% reporting has drug use (especially Ecstasy). Approximately 87% of MSM self-learning or communicating with others on HIV prevention, only 52.8% of MSM has good knowledge about HIV prevention and 50.3% of them had HIV test in last 6 months. Therefore, there should be a strategy for behavior change communication focuses on community and MSM group in order to change views of citizen, reduce the stigma against MSM, help MSM to access HIV prevention services for protecting themselves and community health.*

**Key words:** MSM, HIV, men who have sex with men, HCMC

## TÓM TẮT

*Với mục đích tìm hiểu các hành vi nguy cơ lây nhiễm HIV cũng như tỉ lệ tiếp cận dịch vụ dự phòng lây nhiễm HIV trong nhóm MSM tại TP.HCM. Nghiên cứu được thực hiện trên 400 MSM tại TP.HCM có hành vi QHTD ít nhất 1 lần trong 6 tháng trước khi tham gia nghiên cứu. Kết quả nghiên cứu cho thấy: tuổi trung bình 25,1 tuổi (18 – 48), 65% học vấn trung cấp/cao đẳng/đại học, 62,8% MSM có việc làm toàn thời gian, thu nhập trung bình/tháng là 5 triệu đồng (1 – 40). Hành vi nguy cơ trong 12 tháng qua: 16,5% MSM có hành vi QHTD nhận tiền, 60,2% MSM không sử dụng BCS thường xuyên khi QHTD, 6,3% MSM có sử dụng ma túy (đặc biệt là thuốc lắc). Khoảng 87,0% MSM tự tìm hiểu hoặc được cung cấp các thông tin về dự phòng lây nhiễm HIV, nhưng chỉ có 52,8% MSM có kiến thức đúng về dự phòng HIV và 50,3% MSM từng đi xét nghiệm HIV trong 6 tháng qua. Do đó, cần có chiến lược truyền thông thay đổi hành vi tập trung vào cộng đồng và nhóm MSM. Thay đổi quan điểm của cộng đồng, giảm kỳ thị đối với nhóm MSM, giúp MSM lộ diện để tiếp cận các dịch vụ để bảo vệ sức khỏe cho bản thân họ và cộng đồng dân cư.*

**Từ khóa:** MSM, HIV, quan hệ tình dục đồng giới, TP.HCM

## BACKGROUND

The term of "men who have sex with men" is translated from the English "men who have sex with men", abbreviated as MSM, and is known in Vietnam in the 1990s with HIV [1]. The term of "men who have sex with men" is interpreted very differently depending particular cultural and social contexts, where sexual activity between men occurs. The most important difference to distinguish a MSM with a man is to listen to their sharing

themselves or observe how they attract other men, some men identify themselves as heterosexual but also have sex with men for various reasons (eg, isolated in an all-male environment, etc) [13]. The high risk sexual behavior such as having unprotected anal sex and using drug are main factors for HIV infection among MSM group [2, 10].

According to the World Health Organization (WHO), HIV/AIDS is still an important public health problem in all over the world.

By the end of 2014, there were about 36.9 (34.3 to 41.4) million people are living with HIV, with 2.0 (1.9 to 2.2) million new infections HIV [7]. In 2014, there were 1.2 (980,000 to 1.6) million AIDS-related deaths [8]. The average HIV prevalence among MSM has exceeded 1% of the population and this percentage is much higher than the rate of HIV infection among men in general [12]. In Vietnam, over 20 years of fighting against with HIV/AIDS, although the epidemic has limited in recent years, the number of new HIV infections reducing detected, prevalence of HIV infection among high risk groups reducing (injecting drug users, female sex workers). However, prevalence of HIV infection among MSM is still increasing. In Ho Chi Minh City, since the first HIV infected case recorded in December 1990 to the end of 2015, there were 30,774 infected people and 11,067 AID-related deaths [3]. The result of annual epidemiological survey showed that HIV prevalence in IDU group reduced steadily by year (average percentage of infection is 43.6% in 2006 – 2010 and 28.9% in 2011-2013), HIV prevalence in FSW group also reduced (average percentage of infection is 9.7% in 2006 – 2010 and 4.1% in 2011-2013), however HIV prevalence in MSM group still remain at high risk (approximately 15% in the year) [15].

In the 5-years HIV/AIDS prevention strategy (2011-2016) in Ho Chi Minh City (HCMC), MSM groups have been identified as a priority group to promote HIV prevention intervention. The various forms of intervention are applied through MSM social networks, self-help groups, entertainment venues, peer education and online network, etc in order to provide information, education and behavior change communication to help MSM raising awareness, knowledge, changing attitudes and practice safe behaviors to prevent HIV transmission. The results of harm reduction program showed that HIV prevalence among MSM increasing in HCMC. What are the main risk factors? How to reach 60% of MSM hiding? What are challenges in accessing HIV prevention and treatment services? The answers will help making suitable action plan in future as well as evaluate effectiveness of harm reduction

activities on MSM group in HCMC in last period.

## **METHODOLOGY**

### **Study design and sample size.**

A mixed quantitative and qualitative study will be used in this study. The semi-structured questionnaires used to collect data through 400 interviews with MSM was 18 years and older, living in HCMC, and has sex at least one time in the last 6 months. Data collected between January and May in 2015.

### **Data collection**

MSM is a vulnerable group, hiding, difficult to access [6]. Therefore, this study applied method of the Respondent Driven Sampling (RDS). The RDS is considered as an effective method to collect data of population which is difficult to access like high risk group [9]. This method is similar to snowball one, using target samples to invite their peer in social network join in reasearch. However, the strong point of RDS is to calculate exactly population target variable [11].

The process of selecting study subjects started by selecting first target samples – called “seed”. Each “seed” has different criteria and charateristic, based in different sites, know well the network of target population. These “seeds” are selected by

MSM peer educators in HCMC. After interviewing, the first “seeds” received 3 coupons to invite their peers to join in study and keep going on until fix requested number of samples.

The first “seeds” are selected as representatives of MSM population in HCMC. Based on reports of Harm Reduction program (of Ho Chi Minh City HIV/AIDS Center, abbreviated as PAC) 2003, number of MSM received HIV prevention services is 15,420 [5], estimated number of MSM is 40,172 (2014) [10]. The balance of MSM hiding is about 60% in HCMC:

- Step 1: Selecting investigator: MSM priority. Total number is 5 people (1 female who are experienced in working and good connection with MSM community and 4 MSM).
- Step 2: Training on data collection: Before time of data collection. The investigator are trained on reasearch introduction, objectives, skills and techniques of interview a MSM.



- Step 3: Data collection tools: Questionnaires, million), 28% MSM earns 1-5 million dongs, 28.5% MSM earns 6 - 10 million dongs, 7.9% MSM earns 11 million dongs or higher.
- Step 4: Selecting “seeds”: Before collecting data, The principal investigators and peer and higher educators to select “seeds”. Selecting 2 “seeds”

**Table 1:** Demographic of MSM in HCMC

at each site<sup>1</sup> (1 – MSM student; 2 – MSM worker).

- Step 5: Identify time and sites for interviews: Time and sites are flexible with consensus of targets and investigators. The main site is G-Link’s office, G3VN<sup>2</sup>, MSM’s sites (coffee, gym, restaurants, bars, etc). The list of sites was provided by Harm Reduction program (PAC).

**Data management and statistics.**

All data is collect antonymously without names, addresses, phone numbers. After collecting, data is saved and controled by code (ID) in safe at PAC office. Nobody except researchers can reach data to ensure confidential information. Data is recorded, cleaned and analysed by software SPSS 17.0. With corresponding 95% CIs and  $\alpha = 0,05$ . Using Frequencies for Descriptive statistics. Using Crosstabs /Chi-Square statistics to consider correlation between sexual behaviors, condom use, HIV tests and demographic, sexual trend, etc.

**STUDY RESULTS**

**Demographic**

The mean age of MSM who join in study is 25.1 (18 – 48). Among of them, 49.5% MSM in the age of 18 – 24 years old, 65% MSM get education at college level and university, 5.5% MSM get MBA, the others are highschool level.

Before 18 years old, 72.5% MSM live in family with grandparents, parents and siblings. However, 10.8% MSM live with mother and sisters; 5.3% live with father and brothers.

In general, almost MSM have not married (96.5%), 2.8% MSM is living with wife and 1% MSM divorce/separate/widow.

Until the time of research (1 – 05/2015), among of 400 MSM, 29% MSM in study, 62,8% in work, 0.3% MSM has no job. About income per month, 257 MSM agree to answer this question, the average income of MSM is about 5 million dongs/month (1– 40

	Frequency (n=400)	Percentage %
<b>Age</b>		
Mean	25.1 (18 - 48)	
18 - 24 years old	198	49.5
25 - 34 years old	184	46.0
25 - 48 years old	18	4.5
<b>Education</b>		
Never go to school	3	0.8
Primary school	7	1.8
Secondary school	24	6.0
Highschool	84	21.0
College/university	260	65.0
Master and higher	22	5.5
<b>Before 19 years old</b>		
Living with parents and siblings	290	72.5
Living with mother and sisters	43	10.8
Living with father and brothers	21	5.3
Living with grandparents	32	8.0
Living with relatives	14	3.5
<b>Marriage Status</b>		
Never married	386	96.5
Married	11	2.8
Separate/divorce	1	0.3
Widow	2	0.5
<b>Job status</b>		
Student	116	29.0
In work	251	62.8
Unemployed	21	5.3
Working and studying	12	3.0
<b>Total average income per month</b>		257
Average	5 million (1 - 40 million)	
1 - 5 million	161	40.3
6 - 10 million	72	18.0
11 - 20 million	15	3.8
over 20 million	6	1.5
No answer	146	36.5

<sup>1</sup> 5 sites in district 1, 6, 10, Binh Thanh and Thu Duc.

<sup>2</sup> IEC sites for MSM in Ho Chi Minh City



### HIGH RISK SEXUAL BEHAVIORS

#### Commercial sex work (CSW)

There is 16,5% (66/400) MSM who have commercial sexual behaviors, about 5.4 times (1 – 30) per month. The MSM has commercial sexual behaviors about 2 – 5 times in last month (58.7%), 6 – 10 times (19,6%), 1 time (13%), 15 times ( a few MSM). Based on result of Chi-square, with corresponding 95% CIs and  $\alpha=0.05$ : the age, income, sexual trend or “givers”/ “receivers” is not concerned to commercial sexual behaviors of MSM. However, sexual behaviors of MSM is concerned to education (P=0.012), family situation before 18 years old (P<0.0001), current situation (whom living with) (P=0.008) and employment (P=0.010).

#### Using condoms

About 384/400 MSM used condom with sex partners, but just 39.8% (153/384) of which always use condoms with all sex partners, 60.2% (231/384) MSM do not use condoms regularly. As the result of Chi-Square statistics, the factors which are not concerned to using condoms are age, job, sexual trend, HIV/AIDS knowledge. However, using condoms is concerned to some factors such as education (P=0.016) and living situation (P=0.05).

#### Using drugs

The study results illustrate that one MSM can use many kinds of drugs, there is 6.3% (25/400) MSM used drugs in the last 12 months, and detailed in which: 3.1% MSM use Heroin; 43.8% MSM use Ecstasy; 40.6% MSM use Methamphetamin, 12.5% MSM use Ketamin. As the result of Chi-Square analysis, using drugs is concerned to education (P<0.001); job (P=0.006); and commercial sexual behaviors (P=0.037).

**Table 2:** High risk behaviors among MSM

High risk behaviors	Fequency	Percentage %
Having commercial sexual behaviors in the last 12 months	400	100%
Yes	66	16.5
No	334	83.5
Always use condoms in the last month	384	100%
Yes	153	39.8
No	231	60.2

Using drugs in the last month	400	100%
Yes	25	6.3
No	375	93.8

#### Accessing HIV prevention services

About 87.0% MSM find out themselves or receive HIV knowledge and safe sex, 52.8% MSM has good knowledge on HIV prevention based on national evaluation check list [4].

The main sources: 44.8% MSM get information from peer educators of HIV/AIDS prevention program, 23.5% from peer educators of network, 41% from friends, 41.6% from HIV testing and Counseling sites, 31.4% from MSM clubs, 25.7% from sex partners, 60% from websites for MSM 57.5% from internet, newspaters, leaflets, etc.

About 54.3% MSM received free condoms in the last 12 months, 51.3% receive free lubricants, 37% used to join in groups/teams. About 70.5% MSM know addresses of HIV Testing and Counseling sites in HCMC, 50.3% MSM had HIV test in the last 6 months.

**Table 3:** Prevalence of MSM accessing information and services on HIV prevention in HCMC

	Fequency (n = 400)	Percentage%
Find out/receive knowledge on HIV and safe sex	348	87.0
Good knowledge on HIV prevention	211	52.8
Sources:		
<i>Educators</i>	141	44.8
<i>Peer educators</i>	74	23.5
<i>Friends</i>	129	41.0
<i>HCT sites</i>	131	41.6
<i>Clubs/groups/teams</i>	99	31.4
<i>Sex partners</i>	81	25.7
<i>MSM websites</i>	189	60.0
<i>Internet, newspapers, leaflets, etc</i>	181	57.5
Receiving free condoms in the last 12 months	217	54.3
Receiving free lubricants in the last 12 months	205	51.3
Used to join in clubs/groups/teams	148	37.0

concerned to HIV prevention in HCMC		
To know addresses of HCT sites in HCMC	282	70.5
Having HIV test in the last 6 months	201	50.3
To know addresses of ARV sites in HCMC	10	2.5

## DISCUSSION

The best way of HIV prevention through sex is using condoms. However, only 38% MSM always use condoms, 60.2% do not use condom usually. Especially, the low-educated people do not use condoms oftently. Based on a MSM study in Mongolia, the most risk is anal sex. (OR=4,54 ; 95% CI=2,41-8,56) [14]. The other researches also show that it's necessary to conduct a comprehensive strategy on behavior change communication focused to target groups in order to reduce HIV transmission in MSM population and community.

Besides, the research shows that there is 6.3% (25/400) MSM used drugs in the last 12 months and 0.3% IDU (1/25), this data is 8% in 2011 (by National Institute of Hygiene and Epidemiology in 2011) [2]. At the moment,

using drugs changed in MSM group in HCMC, 43.8% (14/32) MSM use Ecstasy, 40.6% (13/32) MSM use Methamphetamin) and 12.5% (4/32) MSM use Ketamin – this is a kind of very expensive and pure drug for smoking (this is not recorded in the previous study). Therefore it's necessary to conduct more studies on using Ketamin among MSM group. The MSM who are at low education (primary school) use drugs much more than others 16.5 times (CI 95%: 3.53 – 76.98; P<0.0001), the unemployed MSM also use drugs much more than others.

## CONCLUSION AND RECOMMENDATION

The MSM sexual behaviors, using drugs, having unsafe anal sex with many sex partners are high risk of HIV transmission among MSM population. Besides, the number of MSM who get good HIV knowledge and access healthcare is very low. Therefore, it's necessary to conduct a behavior change communication strategy focused on MSM population in order to reduce stigma and discrimination, help MSM accessing HIV prevention services and having safe sex, reaching the national goal of ending HIV/AIDS epidemic in 2030 in Vietnam.

## REFERENCES

- VŨ NGỌC BẢO, PHILIPPE GIRAULT (2005) *Đối mặt với sự thật: Tình dục đồng giới nam (MSM) và HIV/AIDS ở Việt Nam*, NXB Thế Giới, Hà Nội,
- NGUYỄN TRẦN HIỀN, NGUYỄN THANH LONG, STEPHEN J. MILLS, LE NGUYỄN LINH VI, ET AL (2011) "IBBS round II - Viet Nam 2011".
- NGUYỄN HỮU HÙNG, SỞ Y TẾ TP.HCM (2016) "Báo cáo hoạt động phòng chống HIV/AIDS của TP.Hồ Chí Minh năm 2015".
- CỤC PHÒNG CHỐNG HIV/AIDS VIỆT NAM (2014) "Cung cấp chỉ số đánh giá chương trình truyền thông phòng chống HIV/AIDS".
- ỦY BAN PHÒNG CHỐNG AIDS TP.HCM (2014) "Báo cáo chương trình chăm sóc điều trị HIV/AIDS tại TP.HCM năm 2013".
- VIỆN VỆ SINH DỊCH TỄ TRUNG ƯƠNG, ET AL (2007) "Kết quả chương trình giám sát kết hợp hành vi và các chỉ số sinh học HIV/STI (IBBS) tại Việt Nam 2005 - 2006".
- PATRICK NADOL (2012) "Size estimation MSM in Vietnam".

