



• By clicking the banner advertisement of the survey posted on the front page of the mobile application or the website, registered members were directed to the survey.





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제12회 아시아 대도시 감염병 대책 컨퍼런스 12th Annual Conference on Countermeasures to Combat Infectious Diseases in Asia



Study design and questionnaire

- A cross-sectional study
- Data collected: July 20 August 20 2016
- Inclusion criteria: individuals who were at least 18 years of age and MSMs registered members of the website
- Questionnaire: general, sexual related characteristics and intention of HIV testing





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Statistical analysis

- The subjects' socio-demographic, sexual related characteristics and intention of HIV testing were analyzed using frequencies and percentages as well as the chi square test.
- A logistic regression analysis was performed to identify the factors associated with intention of HIV testing.







- 2,915 subjects have completed the survey and were analyzed.
- 2,587 (88.7 %) of the subjects responded as to have intention to take an HIV test and 328 (11.3 %) of the subjects responded as not to.
- Table 1 & 2 summarizes the socio-demographics, sexual related characteristics of MSM subjects



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Table 1. Socio-demographic characteristics of MSM including MTF subjects (n=2,915)

Variables		Individual sum (%)	Intention to take an HIV test (%)	Р
Sex	Male	2,904 (99.6)	2,576 (88.7)	.237
	MTF	11 (0.4)	11 (100)	
Age (years)	10-19	49 (1.7)	36 (73.5)	<.001
	20-29	1,700 (58.3)	1,529 (89.9)	
	30-39	793 (27.2)	712 (89.8)	
	40-49	317 (10.9)	266 (83.9)	
	≥ 50	56 (1.9)	44 (78.6)	
Marital status	Married	70 (2.4)	62 (88.6)	.875
	Unmarried	2,645 (90.7)	2,349 (88.8)	
	Separated/divorced	35 (1.2)	29 (82.9)	
	Living with a man	154 (5.3)	137 (89.0)	
	Living with a woman	4 (0.1)	4 (100)	
	Bereaved	7 (0.2)	6 (85.7)	
Urban area	Yes	2,702 (92.7)	2,404 (89.0)	.174
	No	213 (7.3)	183 (85.9)	

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Table 1. Socio-demographic characteristics of MSM including MTF subjects (n=2,915) Continued

	Variables	Individual sum (%)	Intention to take an HIV test (%)	Р	
Religion	No religion	1,926 (66.1)	1,722 (89.4)	.57	
	Buddhism	326 (11.2)	285 (87.4)		
	Christian	421 (14.4)	369 (87.6)		
	Catholic	228 (7.8)	198 (86.8)		
	Etc	13 (0.4)	12 (92.3)		
Educational level	High school or below	982 (33.7)	873 (88.9)	.853	
	College or above	1,933 (66.3)	1,714 (88.7)		
Occupation	Professional	455 (15.6)	414 (91.0)	.176	
	Managers and senior officials	67 (2.3)	58 (86.6)		
	Administrative and secretarial	665 (22.8)	597 (89.8)		
	Sales	104 (3.6)	90 (86.5)		
	Personal and customer service	389 (13.3)	346 (88.9)		
	Process, plant and machine operatives	181 (6.2)	151 (83.4)		
	Agricultural	13 (0.4)	10 (76.9)		
	Unemployed	821 (28.2)	729 (88.8)		
	Part-time job	160 (5.5)	142 (88.8)		
	Etc 14	59 (2.0)	49 (83.1)		

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Table 1. Socio-demographic characteristics of MSM including MTF subjects (n=2,915) Continued

Varia	bles	Individual sum (%)	Intention to take an HIV test (%)	Р	
Monthly income ^a	0-1,000	772 (26.7)	683 (88.5)	.965	
(USD, \$)	1,000-2,000	661 (22.8)	587 (88.8)		
	2,000-3,000	767 (26.5)	687 (89.6)		
	3,000-4,000	401 (13.8)	354 (88.3)		
	4,000-5,000	137 (4.7)	121 (88.3)		
	≥ 5,000	159 (5.5)	139 (87.4)		
Alcohol intake	No alcohol intake	634 (2.7)	563 (88.8)	.965	
	Alcohol intake	2,281 (78.3)	2,024 (88.7)		
Smoking	No smoking	1,744 (59.8)	1,536 (88.1)	.160	
C	Smoking	1,171 (40.2)	1,051 (89.8)		
Regular exercise	No regular exercise	923 (31.7)	797 (86.3)	.005	
	Regular exercise	1,992 (68.3)	1,790 (89.9)		
Subjective health status	Very bad	43 (1.5)	36 (83.7)	.018	
	Bad	449 (15.4)	389 (86.6)		
	Moderate	1,668 (57.2)	1,494 (89.6)		
	Good	639 (21.9)	574 (89.8)		
	Very good	116 (4.0)	94 (81.0)		

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Table 2. Sexual related characteristics of MSM including MTF subjects (n=2,915)

	Variables	Individual sum (%)	Intention to take an HIV test (%)	Р	
Sexual orientation	Homosexual	2,294 (78.7)	2,061 (89.8)	<.001	
	Bisexual	621 (21.3)	526 (84.7)		
Sexual partner during the last six months	Men sex with men only	2,193 (75.2)	1,997 (91.1)	<.001	
	Mainly with men, sometimes with women	123 (4.2)	112 (91.1)		
	With both men & women alike	53 (1.8)	44 (83.0)		
	Only with women	18 (0.6)	13 (72.2)		
	Mainly with women, sometimes with men	43 (1.5)	37 (86.0)		
	No sexual partner	485 (16.6)	384 (79.2)		
Relationship status	No regular or irregular partner	1,212 (41.6)	1,030 (85.0)	<.001	
	Maintain relationships with one regular partner	671 (23.0)	612 (91.2)		
	Maintain relationships with several regular partners	72 (2.5)	67 (93.1)		
	Maintain relationships with one or several regular partners, sometimes relationships with irregular partners	269 (9.2)	246 (91.4)		
	Have occasional encounter without regular partner (Open relationship)	691 (23.7)	632 (91.5)		
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- Univariate analysis revealed that age (p<.001), regular exercise (p=.005), subjective health status (p=.018), sexual orientation (p=.002), sexual partner during the last six months (p<.001), and relationship status (p<.001) were associated with intention of HIV testing (Table 1 & 2)
- Binary logistic regression analysis was performed, which included the following factors: age, subjective health status, regular exercise, sexual orientation, sexual partner during the last six months, relationship status.
- Binary logistic regression analysis identified several factors related to the intention of HIV testing. (Table 3)

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Table 3. Factors influencing HIV testing MSM including MTF subjects (n=2915) 제12회 아시아 대도시 김영병 대책 컨팩런스

Variable	Reference group	Categories	aOR	95% CI	Р
Age (years)	10-19	20-29	1.19	0.47-3.01	0.72
		30-39	0.40	0.20-0.78	0.01
		40-49	0.44	0.22-0.88	0.02
		\geq 50	0.74	0.36-1.54	0.42
Regular exercise	No regular exercise	Regular exercise	1.34	1.04-1.74	0.02
Subjective health	Moderate	Very bad	0.49	0.30-0.83	0.007
status		Bad	0.71	0.27-1.89	0.50
		Good	0.61	0.35-1.08	0.09
		Very good	0.52	0.30-0.90	0.02
Sexual orientation	Homosexual	Bisexual	1.15	0.25-5.34	0.86
		Etc	1.56	0.33-7.31	0.58
Sexual partner during the last six months	Only with men	Mainly with men, sometimes with women	0.47	0.35-0.63	< 0.001
		With men & women alike	0.39	0.20-0.78	0.007
six months		With only women	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.47	
		Mainly with women, sometimes with men	1.15	0.39-3.43	0.80
		No sexual partner	0.61	0.24-1.54	0.29
Relationship status	Maintain relationships with one regular partner	Maintain relationships with several regular partners	1.63	1.18-2.25	0.003
		Maintain relationships with one or several regular partners, sometimes relationships with irregular partners	0.90	0.34-2.35	0.83
		Have occasional encounter without regular partner (Open relationship)	1.20	0.72-2.00	0.49
		No regular or irregular partner	1.14	0.77-1.68	0.51



- Compared to the 10-19 age group, the 30-39 year age group (aOR: 0.40, 95% CI: 0.20-0.78) and the 40-49 year age group (aOR: 0.44, 95% CI: 0.22-0.88) had a tendency not to get HIV testing.
- Compared to group doing no regular exercise, group doing regular exercise (aOR: 1.34, 95% CI: 1.04-1.74) had more intention to receive HIV testing.
- Compared to moderate subjective health status, very bad (aOR: 0.49, 95% CI: 0.30-0.83) and very good (aOR: 0.52, 95% CI: 0.30-0.90) subjective health status was negatively correlated to intention of HIV testing.
- Compared to the group having sex with only men, group having sex mainly with men but sometimes with women (aOR: 0.47, 95% CI, 0.35-0.63) and group having sex both with men and women alike (aOR, 0.39; 95% CI, 0.20-0.78) had a tendency not to take HIV testing.
- The group having relationships with several regular partners (aOR: 1.63, 95% CI: 1.18-2.25) had more intention to receive HIV testing than the group having relationships with one regular partner.



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- Only members registered an online community for LGBT was included.
- In the case of sexual related characteristics associated with individual privacy, the results have the potential to lead to poor reliability and under-reporting of this population due to anonymity.

(Remember shy trump!)

• Subjective health status was assessed by a single item. Self-rated health status may be different according to characteristics of the subjects.



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- 4. Discussion and Conclusion
 - Intention of HIV testing was associated with <u>middle</u> <u>age, regular exercise, subjective health status</u>, and <u>bisexual behaviors</u>.

General interest in health is important in taking/inducing HIV test.

MSM is an important target population in Korea in order to prevent the spread of HIV infection

• The first study to evaluate the characteristics of MSM group in South Korea.







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Thank you for your attention

