

Behavioral Sentinel Surveillance (BSS 2013)

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Outline

- Background
- Objectives
- Methods
- Findings
 - Female entertainment worker (EW)
 - Men who have sex with men (MSM)
 - People living with HIV (PLHIV)
- Conclusions

Background

- Behavioral sentinel surveillance (BSS) has been conducted by NCHADS to document behavior changes among sentinel groups since 1997
- In 2008, law against human trafficking has been reinforced, resulting in brothel crackdown across the country. Consequently, brothel based female sex workers become less visible. The emerging pattern of different types of entertainment workers have taken over.
- NCHADS in collaboration with many collaboration partners developed a SOP for Continuum of Prevention Care and Treatment for all entertainment workers (EW) which consists of all types of former direct and indirect female sex workers
- In addition to EW, MSM and PLHIV are also target group of interest in term of boosting the focused prevention for MARPs and positive prevention

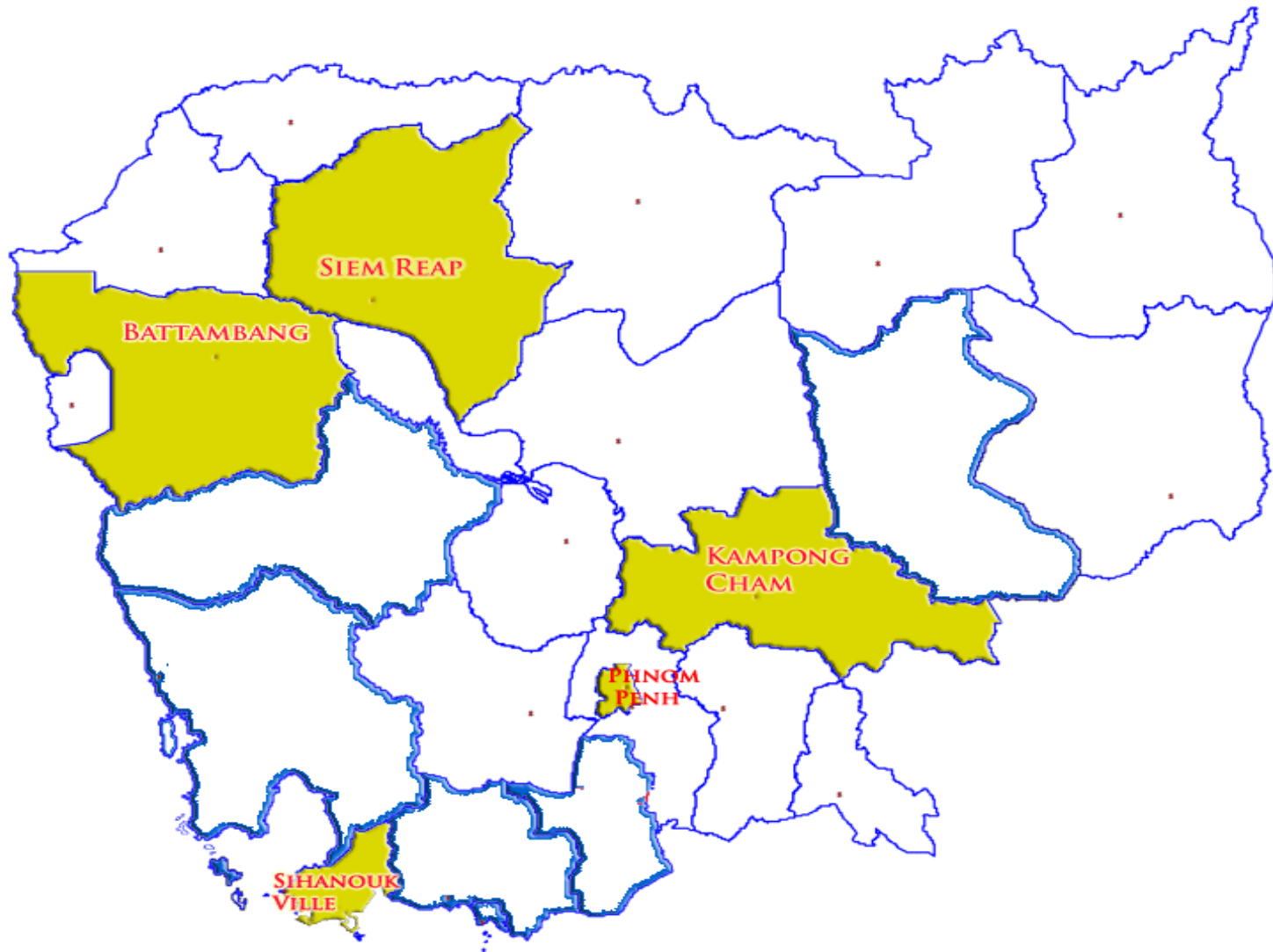
Objectives

- To document HIV related risk behaviors among selected sentinel groups
- To tracks trends in risk behaviors among EW and MSM groups
- To explore common practices toward the use of VCT, STI clinics sexual health and other relevant services
- To investigate the attitude and practice on adherence and towards positive prevention among PLHIV
- To evaluate coverage and the outcomes of interventions targeting selected sentinel groups

Methods

- BSS 2013 methods were kept consistent with previous ones
- BSS 2013 was conducted in **five main city provinces** (Phnom Penh, Kampong Som, Kampong Cham, Siem Reap and Battambang)
- Three sentinel groups were
 - Female EW (n = 1,246)
 - MSM (n = 811)
 - PLHIV (n = 1035)
 - **Total sample size = 3093**
- Sampling
 - Two stage cluster sampling with equal probability was used for EW
 - Time location sampling and venue based sampling was used with MSM
 - Simple random sampling/systematic sampling to select PLHIV from OI/ART clinics

Sites for BSS 2013



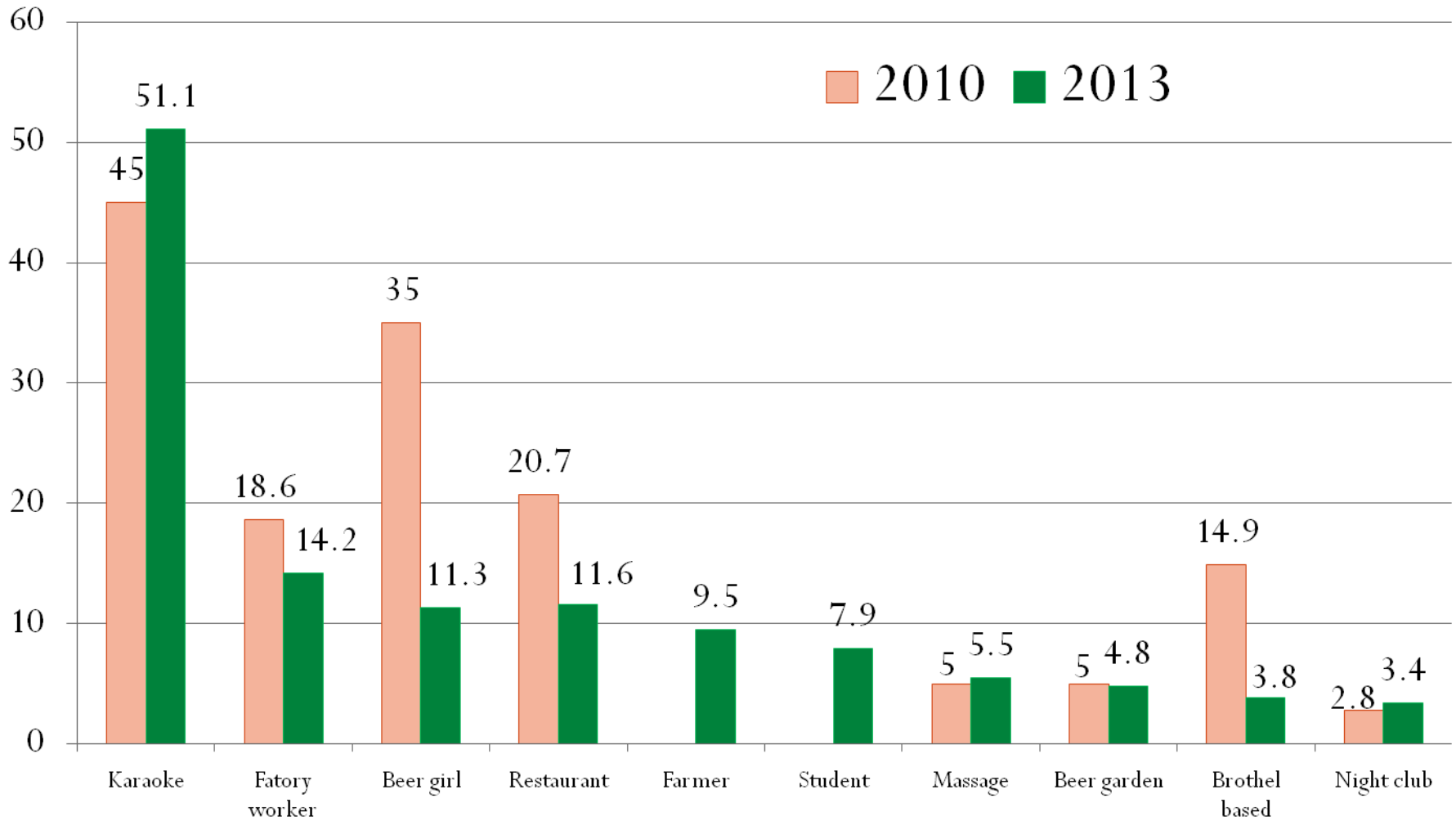
Findings

Female Entertainment Worker

Demographic Characteristics

Variables	2013 N = 1246
Mean age in year (Median)	25.5 (25)
Mean age at first marriage (Median)	19.7 (19)
Report no schooling	9.8%
Have been living in the current city for less than 1 year	25%
Mean duration in current job in months (Median)	21.5 (12)
Mean income in the past month , (Median)	USD 190 (150)

Previous job in the past 12 months (%)



Conditions of Sex Work

Variables	EW 2010 (≤ 2 partner/day)	2013
Mean number of EW in the same establishment (Median)	50(30)	69 (50)
Mean charge for sex with client last time, (Median)	USD42(40)	USD 48 (50)
Availability of condom at the workplace	33.6%	21.5%
Report having regular partner	17.1%	15.0%
Available room for sex in the establishment	19.4%	15.0%

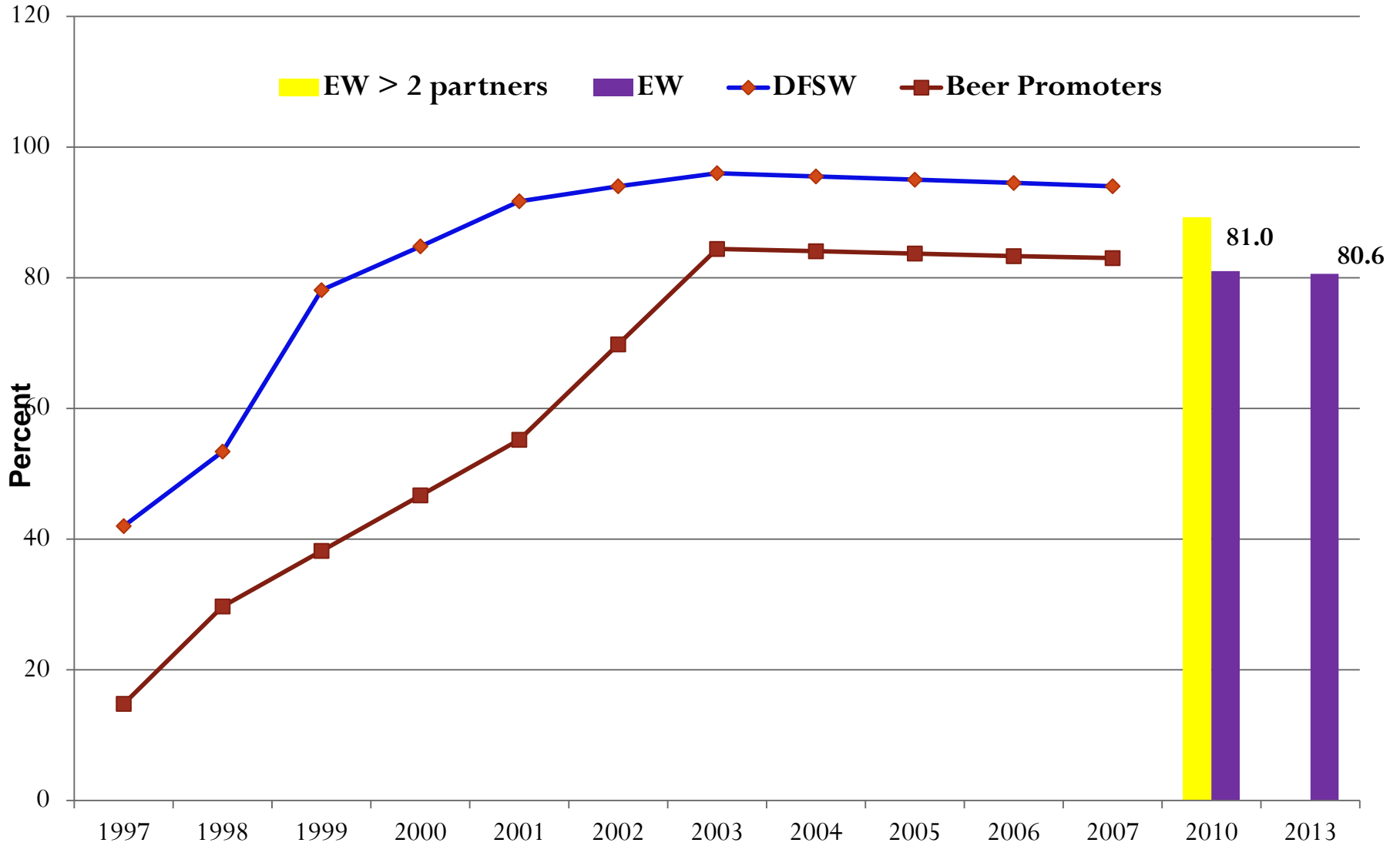
Sexual Behaviors

Variables	2013 N=1246
Age at first sex (Median)	16.5 (18)
Proportion never had been sexually active	15%
Partner of the first sex among those who experienced sex	
Husband	58.5%
Boyfriend	31.3%
Client	7.5%
Rape	1.9%
Age at first sex in exchange for gift or money, mean (Median)	23.2 (22)
Report sex in exchange for gift or money	41.0%
Mean number of sexual partner in the last working day (Median)	1.3 (1)
Report > 2 sex partners in the last working day	6.3%
Ever have sex in group (voluntary and forced)	3.3%
Had sweetheart in the past year	49.1%
Had sex with sweetheart in the past year	79.4%

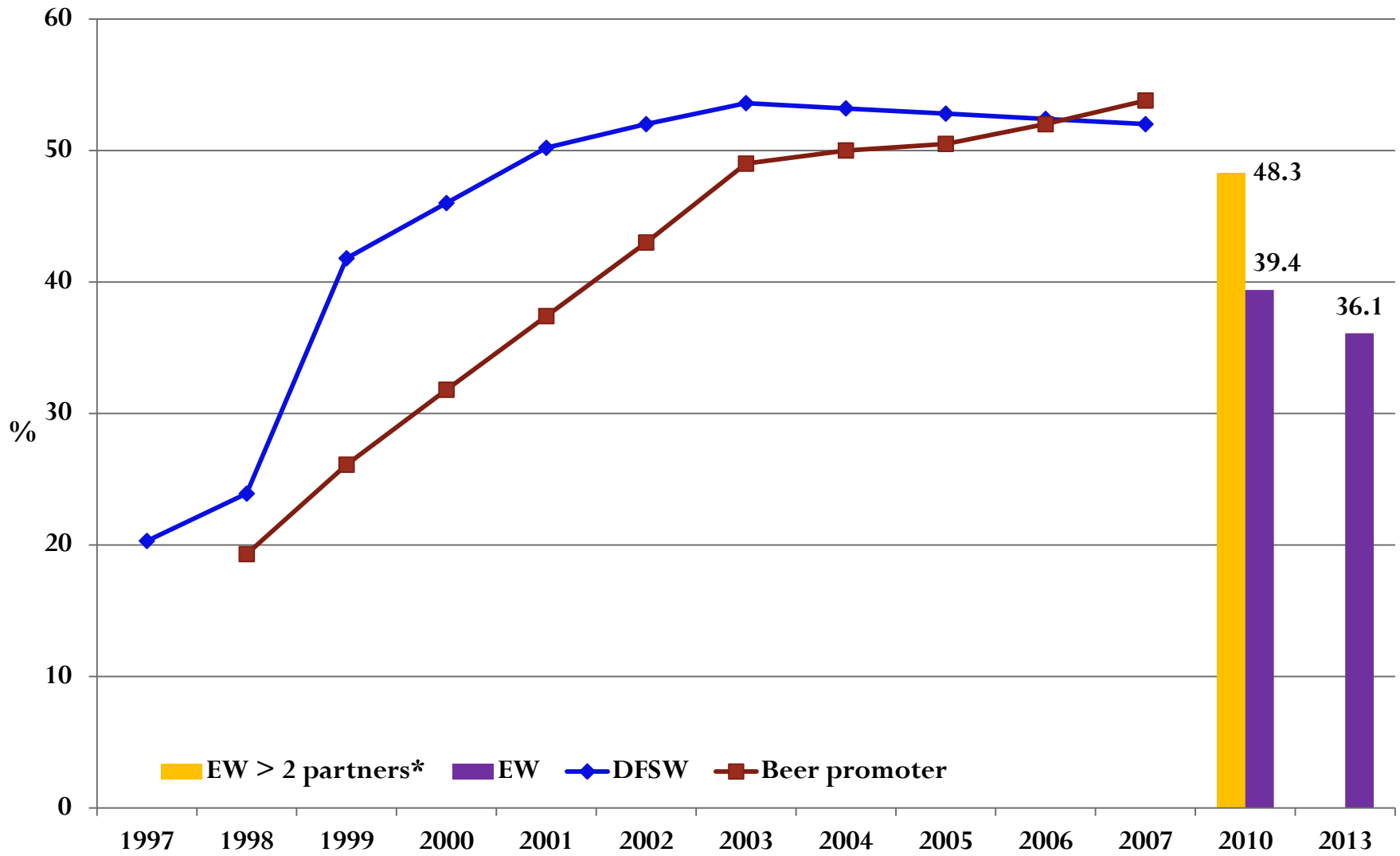
Patterns of Condom Use

Variables	EW 2010 (≤ 2 partner/day) (%)	EW 2013 (%)
Always condom use with sweetheart in the past 3 months	39.4	36.1
Used condom last sex with sweetheart	55.3	52.1
Always condom use with husband in the past 3 months	16.5	16.5
Condom use last sex with clients (paid partner)	94.8	94.3
Consistent condom use in the past 3 months with clients	81.5	80.6
Consistent condom use in the past week with clients	81.5	80.5
Use more than one condom in the last paid sex	12.2	8.8
Ever experienced condoms broken	14.9	10.7
Lubricant use for the last paid sex	19.1	9.7

Trend of Consistent Condom Use with Clients

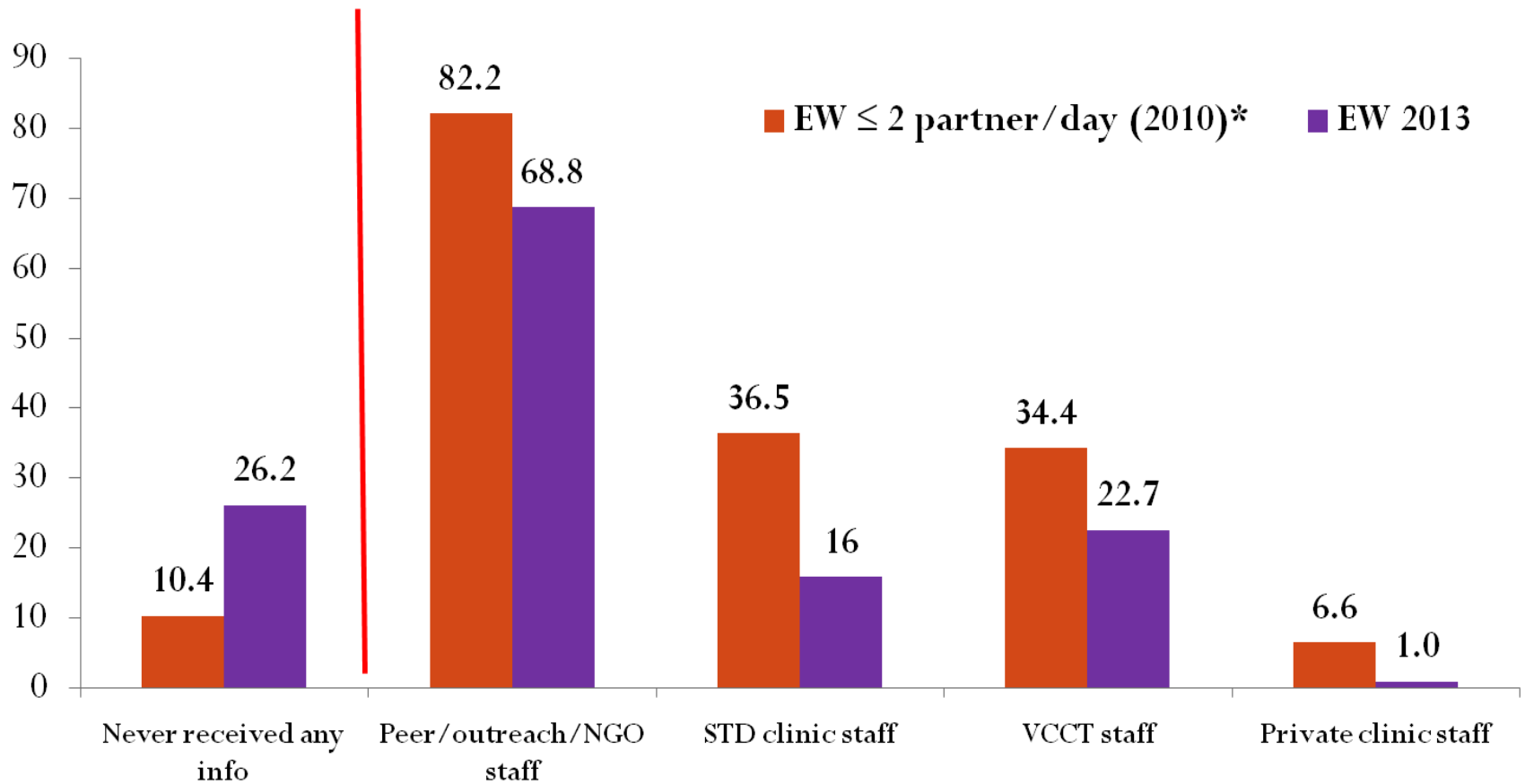


Trend of Consistent Condom Use with Sweethearts



* EW > 2 partners were used in 2010 to approximate to the DFSW after the brothel crack-down 2008; where in 2013, this proportion became small (6.3%)

People who provides HIV information to EW



* Use EW ≤ 2 partners/day to compare with EW in 2013 (Few EW > 2 partners found in 2013)

STI Self Report and Usage of Services

Variables	EW 2010 (≤ 2 partner/day) (%)	EW 2013 (%)
<i>Reported any STI symptoms in the past year</i>	NA	37.8
- Cut or sore on genital organ	3	2
- Genital warts	1.2	0.
- Vaginal discharge/ discharge with bad smell	44.2	37.1
<i>First place for their last STI treatment</i>		
- NGO clinic	26.9	37.7
- STD clinic	40.5	20.6
- HC and hospital	12.3	8.1
- Pharmacy	10.8	10.9
<i>Reported using public STI clinics in the past 3 months</i>		
- One time	25	35.6
- \geq Two-Three time	39.1	32.8
- Never	20.7	30.3

HIV Testing, care and treatment, drug use

Variables	EW 2010 (≤ 2 partner/day)	EW 2013
Had HIV test in the past 12 months	63.7%	69.6%
Know place to have HIV testing	NA	75.7%
Place for the last HIV testing		
- VCCT/NGO	85	53.3%
- Mobile team/CPIT	NA	28.6%
Received HIV test result last time they had test	98.4%	98.2%
Received counseling before having HIV test	95.1%	87.3%
Received counseling when receiving HIV test result	94.8%	86.0%
Awareness of the availability of ARV drug	82.6%	76.8%
Believe she can received ARV if needed	84.8%	78.4%
Report ever used any drug	10.0%	5.5%

Sexual and Reproductive Health

Variables	EW 2013
Report being pregnant at least one time while working as EW	31.1%
Ever got abortion while working as EW, n = 321	77.3%
Places and services for the last time abortion	
-Private clinic	43.1%
- Public hospital	9.0
-NGO clinic	9.8
- Pharmacy	34.1%
Report using family planning	69.5%
Different FP methods EW have used	
- Condoms	40.7%
- Pills	19.5%
- Withdrawal	10.7%
- IUD	8.1%
- Injecting	7.0%
Received sexual health information in the past 3 months	56%
Received free condoms in the past 12 months	43.1%

Conclusions

Female Entertainment Worker (1)

- High proportion of EW had move from factories, karaoke and restaurants in the past year
- Fewer proportion of EW reported > 2 partners /day (6.3%).
- The trend of consistent condom use among direct and indirect female sex worker can no longer established.
- The consistent condom use among EW in 2013 is relatively lower though stable at about 80%
- Condom use with sweetheart remain low and continue to decline among EW

Conclusions

Female Entertainment Worker (2)

- Generally, EW had good knowledge about HIV/AIDS and its mode of transmissions
- High report of any STI symptoms although high proportion of EW went to STI clinics at least 1 time in the past 3 months and high proportion of EW went to health facilities to get last STI symptoms treated
- Report of access to HIV testing and awareness about ART are remarkably high

Conclusions

Female Entertainment Worker (3)

- High reported prevalence (77%) of induced abortion while working as EW. Private clinics and buying drug from Pharmacy were reported as the main place to induced abortion (77.2%)
- Many report using family planning, commonly condoms and pills
- More than half of the women access to sexual and reproductive health
- Low prevalence of ever used drug among EW; and injecting drug use is rare.

Recommendations

Female Entertainment Workers (1)

- Given a relatively low and declined condom use patterns with paid sex partners and sweetheart, the issue should be re-addressed
- Ensuring the availability of condoms in the work place (?). Innovative model should be explored to improve the consistent condom use with sweethearts.

Recommendations

Female Entertainment Workers (2)

- Given the high self report of STI symptoms (38%) and the high report of induced abortion (77%), the STI/SRH particularly safe abortion should be strongly focused.
- The practice induced abortion using private clinics and self abortion (self medication) raise an alerting concern about unsafe abortion.
 - This should be more addressed to increase the awareness and improve the safe abortion such as in a proper public clinic with trained and skilled health professionals.
- Also condom use as the dual protection against unwanted pregnancy and HIV/STI infection must be more addressed as part of the focused prevention

Men Who Have Sex with Men

Socio-demographic Characteristics

Variables	MSM (n = 572)	Transgender (n = 239)
Mean age, in years	25.3	25.7
Never married, single	89%	97.9%
Mean education level in years, (median)	10 (10)	8.6 (9)
Current job	%	%
Farmer & laborer	20.0	8.4
Private company staff	16.1	2.5
Hairdresser, beauty salon	13.1	40.6
Students (high school & university)	13.0	2.9
Waitress/waiter	10.7	18.8
Sellers	9.8	10.6
Unemployed	5.3	5.8
Lived in this city for at least in the last 12 months	87.8	87.5
Report living with family	62.8	56.6

Sexual Behaviors

Sexual behavior					
		2007		2013	
Variables		MSM (n =388)	Transgender (n =341)	MSM (n = 572)	Transgender (n = 239)
Mean age at first sex, in years (median)		18.8	17.6	18.2 (18)	17 (17)
Age at first selling sex, years (%)		%		%	
< 15		5	13	2.2	12.6
16 -19		57	65	42.4	43.4
20+		38	22	55.4	44
First sex partner (%)					
MSM		30	93	61.7	98.3
Women		56	5	23.1	1.3
Transgender		14	2	15.2	0.4
Report selling sex (%)		36	60	33	61.1

Sex with women

Sexual behavior with women				
Variables	2007		2013	
	MSM (n =388) %	Transgender (n =341) %	MSM (n = 572) %	Transgender (n = 239) %
	Report having sex with women in past 12 months	66	7	35.7
Paid sex with FSW past 12 months	50	6	16.3	0.4
Always use condom when having paid sex in last month	78	30	74.6	0.0
Sold sex to women past 12 months	18	3	5.1	0.8
Always use condom when having sold sex in last month	52.2	7.1	65.4	50.0

Sex and condom use with non paid-men

	MSM (n =388)	Transgender (n =341)	MSM (n = 572)	Transgender (n = 239)
Mean number male partner in past month	3.6	6.3	4.0	6.4
	%		%	
Ever had non-paid sex with men last year	76.8	90.6	77.9	81.6
Use condom for last sex with non-paid men	82.2	93.9	94.8	93.3
Always use condom with non-paid sex with men last month	57.8	49.4	79.0	70.9
Always use lubricant with non-paid sex with men last month	46.8	41	66.7	63.0

Sex and condom use when paying sex with men

Sexual behavior with men	2007		2013	
	MSM (n =388)	(n =341)	MSM (n = 572)	Transgender (n = 239)
Mean number male paid partner in past month	3.4	2.5	2.7	2.0
	%		%	
Pay men to have sex in the past year	18.3	31.5	19.4	10.9
Use condom for last sex with paid men	77.9	90.3	90.0	100.0
Always use condom with paid sex with men last month	38.1	36.4	68.1	84.0
Always use lubricant with paid sex with men last month	41.3	13.6	64.1	76.0

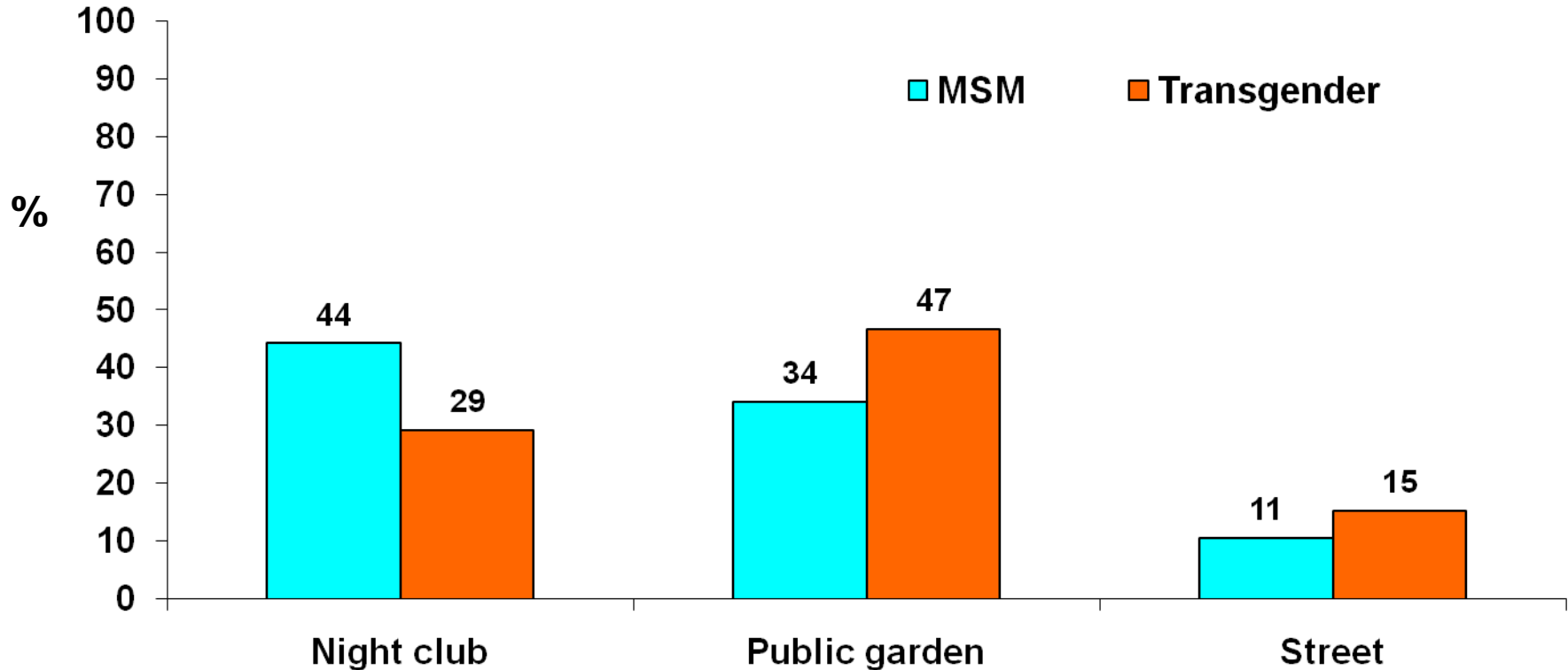
Sex and condom use when selling sex to men

sexual behavior with men	2007		2013	
Variables	MSM (n = 388)	Transgender (n = 341)	MSM (n = 572)	Transgender (n = 239)
	%	%	%	%
Sell sex to men in the past year	26.9	55.7	38.1	57.3
Use condom for last sex when selling sex to men	89.5	96.3	95.8	99.2
Always use condom when selling sex to men in last mo	35.7	44.1	77.4	78.2
Always use lubricant with paid sex with men	49.5	33.9	67.2	60.0

Sex and condom use with Transgender

Sexual behavior with transgender				
	2007		2013	
Variables	MSM (n =388)	Transgender (n =341)	MSM (n = 572)	Transgender (n = 239)
	%		%	
Transgender to have sex in the past year	54	5.3	33.5	1.7
Use condom for last sex with transgender	85	64.3	97.9	100
Always use condom when having sex with transgender in past month	67.4	23.8	78.9	100
Always use lubricant when having sex with transgender in past month	54.3	23.8	65.3	66.7

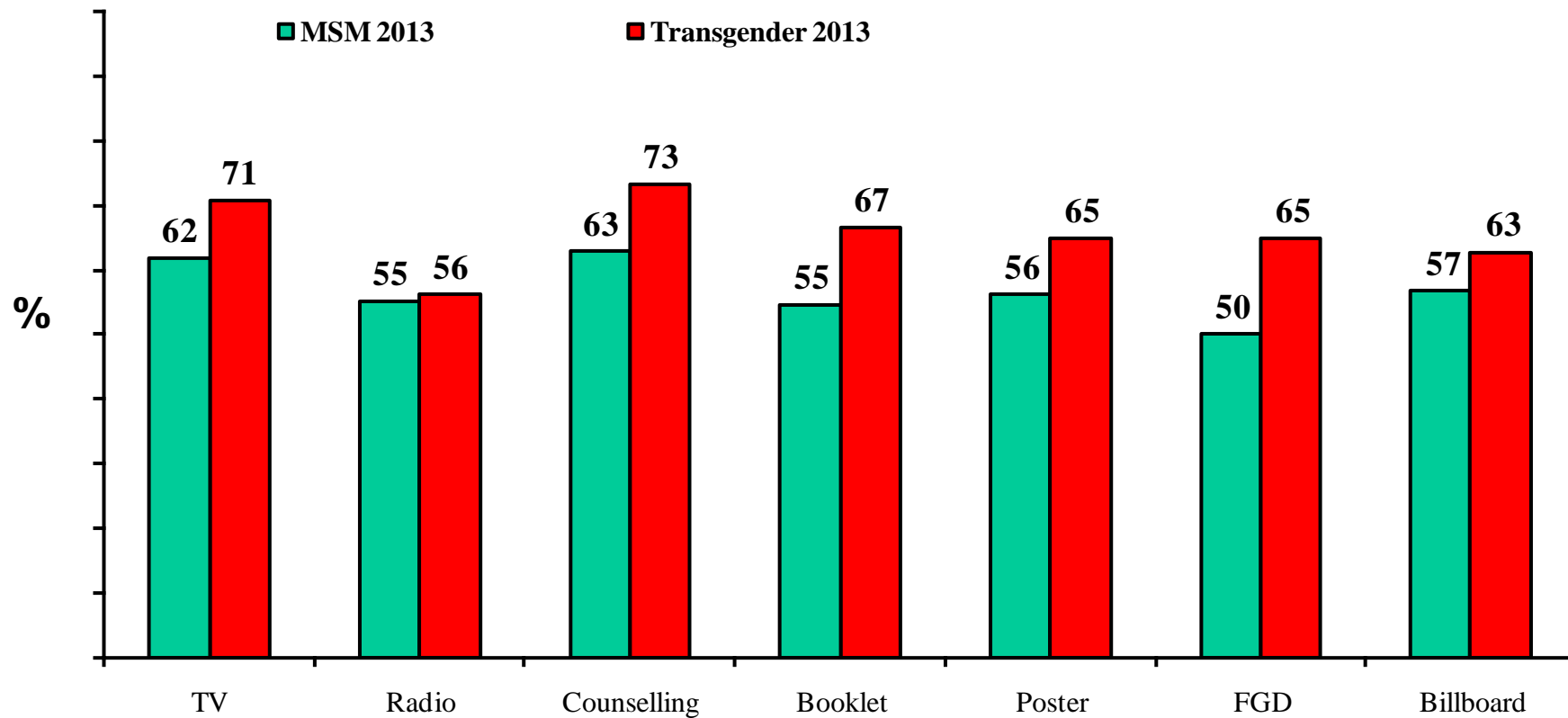
Place where MSM and transgender met clients



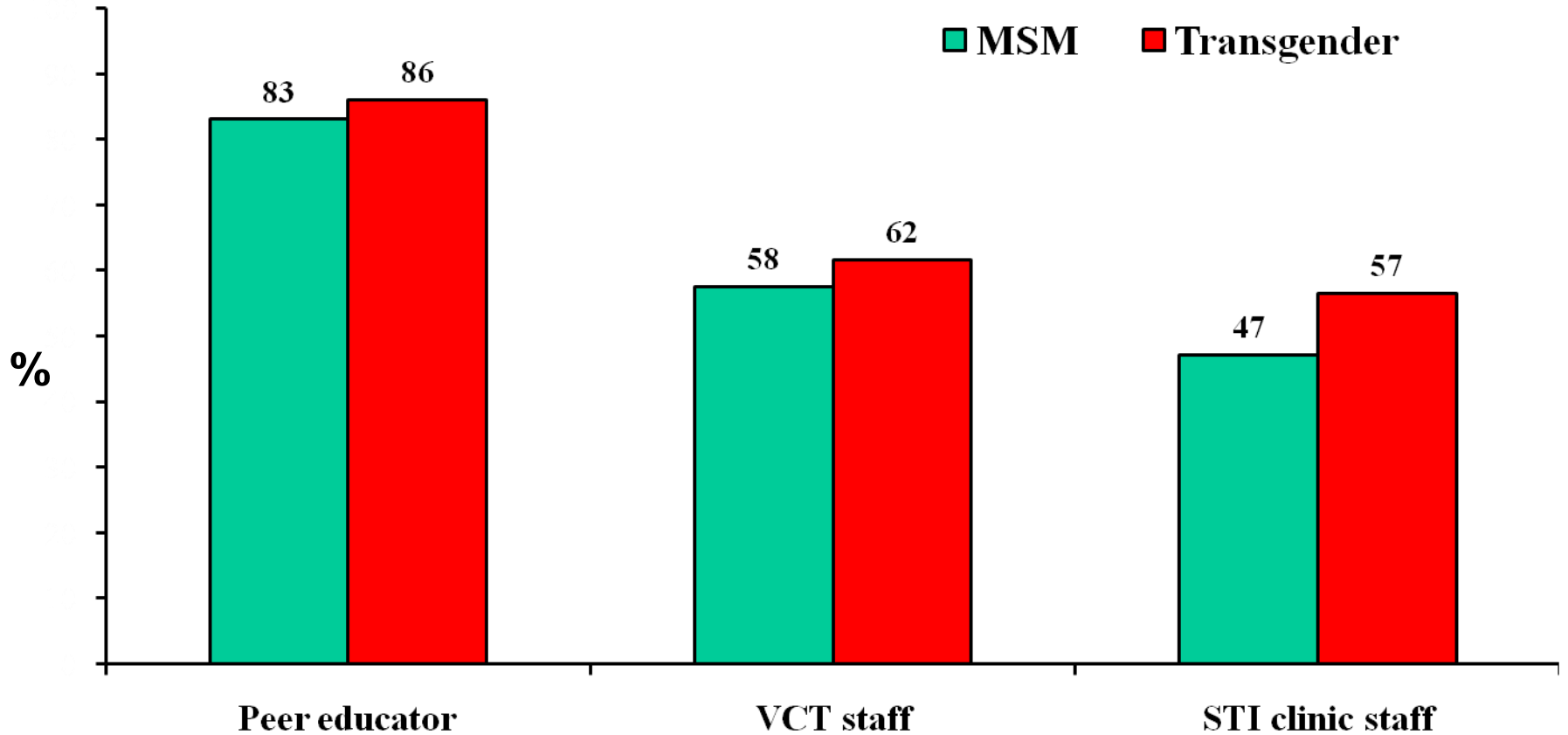
Reported symptoms of STI & care seeking behavior at last episode of STI

Variables	2007		2013	
	MSM (n =388)	Transgender (n =341)	MSM (n = 572)	Transgender (n = 239)
Report of different STI sign and symptomp	17	20	17.9	16.4
Urethral discharge	10	13.3	9.5	3.8
Genital sore or cut	10.8	17.6	3.7	0.8
Genital swelling	7.4	12.7	6.0	0.8
Cut or sore in the anal area	NA	NA	4.2	11.3
Swelling in anal area	NA	NA	4.7	8.0
Anal discharge and irritation	NA	NA	2.1	5.0
Facility used for last STI care				
NGO clinic	48	69	57.8	56.4
Pharmacy	6.8	7	16.7	7.7
STI clinic	8.2	7	14.7	12.8
Private clinic	4.1	8.5	7.8	15.4
No treatment	31.5	7	2.9	7.7
Disclosure MSM status to clinic staff at last visit	55.2	69.2	81.6	89.2
Referred to STI clinic visit by peer educators	47.8	58.4	80.4	70.5

Sources for HIV information in past 3 months



Providers of HIV information in past 3 months



Use of VCCT services among MSM

Variables	MSM (n =388)	Transgender (n =341)	MSM (n = 572)	Transgender (n = 239)
	%		%	
Had HIV test in the past 12 months	57	66	86.7	87.0
Had HIV test in the past 3 months	N/A	N/A	69.7	67.7
Place for the last HIV test				
VCCT	69	79	52.5	40.9
Hospital and health center	17	12	21.0	29.3
Mobile HIV test	N/A	N/A	14.3	15.4
Private lab	12	9	10.8	13.5
Received result for last test	94	98	98.8	99.0
Received HIV counseling at last test	94	98	98.8	100.0

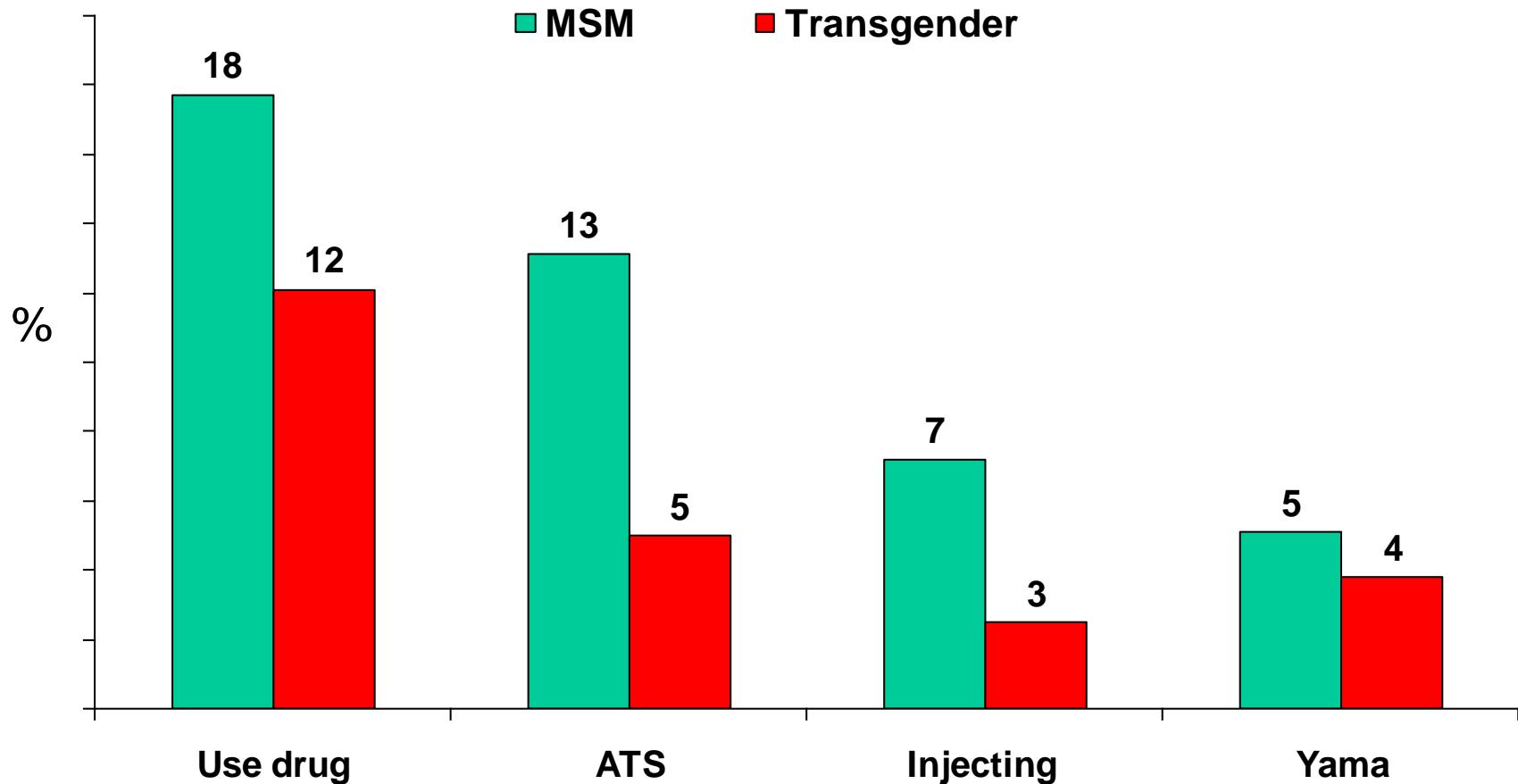
Perception and attitude towards PLHIV

Variables	MSM (n = 572)	Transgender (n = 239)
	%	%
Think that you are at risk of HIV	71.7	82.4
HIV transmission reduced by using condom when had vaginal sex	98.8	99.2
HIV transmission reduced by using condom when had anal sex	98.4	99.6
Have family or relative with HIV	17.2	25.9
Willing to provide care to infected family member at home	91.2	94.1
Willing to by food from PLHIV	89.2	92.1
Willing to keep secret if family member HIV infected	53.4	54.8

Knowledge of Continuum of Care

Variables	MSM (n = 572)	Transgender (n = 239)
	%	%
Know the availability of ART	95.9	93.8
Believe that they can get ART if needed	96.5	97.1
Services that support and care PLHIV		
MMM	23.6	32.6
Home and community based care	21.9	28.5
OI and ART clinic	60.5	68.6
NGO clinic	49.4	51.1

Drug use among MSM, by types of MSM



Conclusions: MSM (1)

- Nearly 50% of transgender worked at beauty salon and hairdresser
- High proportion of MSM and transgender reported selling sex to men though transgender reported selling sex more
- MSM have many different types of partners (*Selling sex and buying sex from women, non-paid sex men, selling sex to men and buying sex from men*)
- Consistent condom use while selling sex to men was under 80%
- Lubricant use was about 60% with any type of male partner

Conclusions: MSM (2)

- More than 15% of MSM and transgender reported at least one sign of STI symptom
- Commonly MSM reported urethral discharge while transgender reported anal sore or discharge
- Close to 60% used NGO clinics for last STI care
- Report of high disclosure to health staff at last STI visit
- High proportion of MSM referred to STI clinic by their peer educators
- Most of MSM received HIV information from mass media and counseling sessions as well as reading materials
- Peer educator, VCT and STI clinic staff play a major role in providing HIV and sexual health information to MSM

Conclusions: MSM (3)

- More than 85% of MSM reported having HIV test in the past year and the mostly the testing was done at VCCT
- Access to Mobile HIV test reported to be low ($\leq 15\%$)
- MSM showed supportive attitude toward PLHIV
- More than 90% of MSM knew about and where to get ART care services if needed
- Drug use was high among MSM compared to EW group, some reported even injecting drug especially among MSM (7%)

Recommendations: MSM

- Either buying or selling sex to men, both higher consistent condom use and lubricant use should be maintained and strengthened to reach about 90% or more within the MSM
- High HIV test should be maintained and more encouraging to use VCT.
- Low report of HIV test using the mobile clinic (**CPIT**) should be reconsidered given the hidden nature of MSM than EW.
- Peers educators from NGO network should be maintained and encourage for the service referrals (HIV test, STI clinic, SRH)

People Living with HIV (PLHIV)

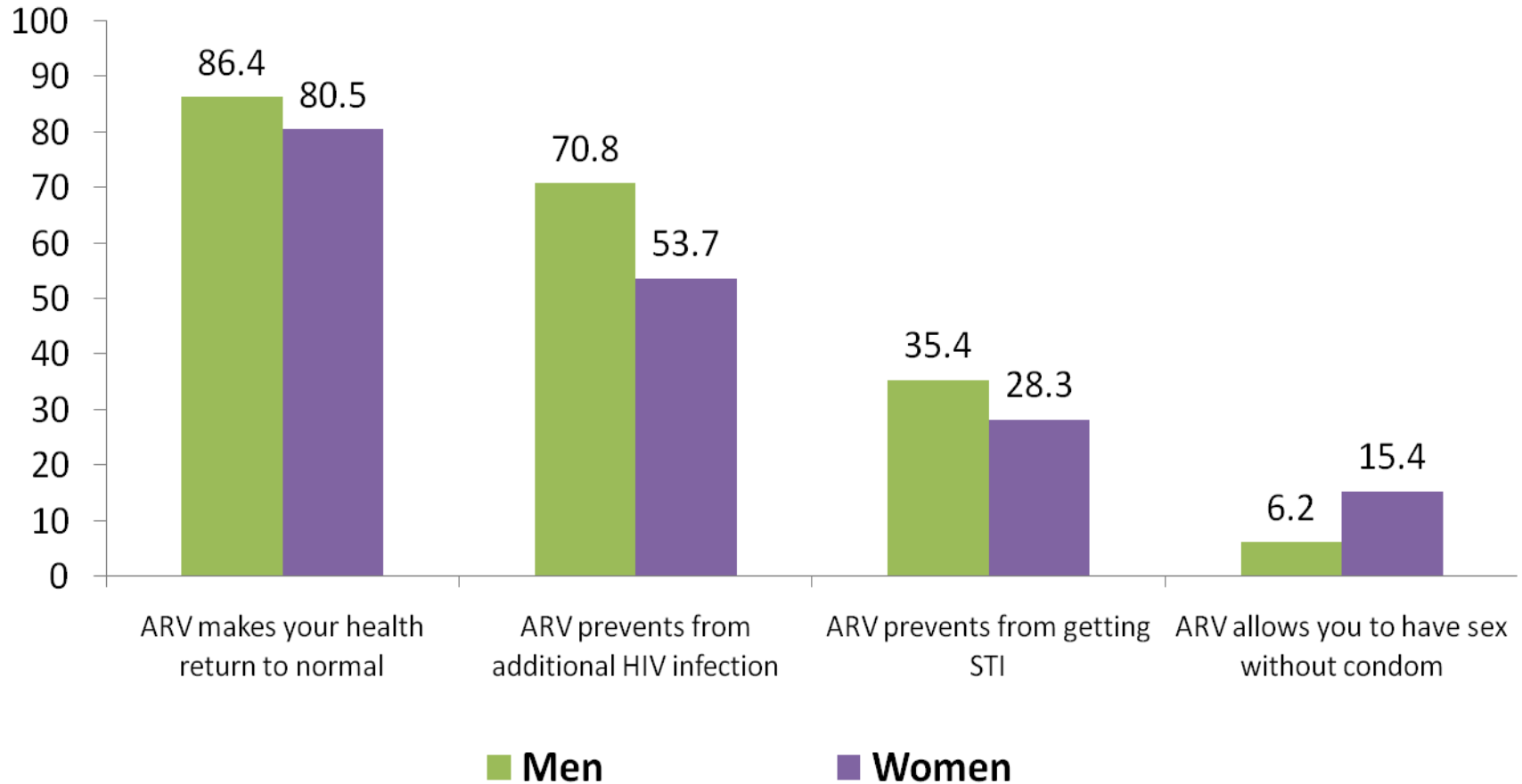
Demographic Characteristics

Characteristics	Total PLHIV (n= 1035)	
	Male (n = 418) %	Female (n = 617) %
Group of PLHIV		
- OI	4.8	5.8
- ARV	95.2	94.2
Mean age in years (median)	40.3 (41)	37.8 (38)
Marital status		
- Currently married	75.6	56.2
- Widowed/widower	13.6	39.2
Mean year of schooling (median)	7.1 (7)	4.1 (1)
Report no education	7.2	25.9

PLHIV Status, Testing and Referral

Characteristics	Total PLHIV (n= 1035)	
	Male (n = 418) %	Female (n = 617) %
Mean years of knowing HIV status (median)	7.2 (7.0)	7.5 (7.3)
Spouses knew your HIV status	97.4	88.5
Place for HIV confirmation		
- VCCT & NGO VCT	52.0	72.3
- Public hospital	36.5	22.9
Their spouses remained HIV negative	36.7%	16.8%
Currently on ART	94.7	92.8
Duration on treatment in years		
- Mean OI treatment (median)	2.9 (2.5)	3.7 (2.9)
- Mean ARV treatment (median)	5.7 (5.8)	5.6 (5.8)
People referred PLHIV to OI/ART services		
- Myself	34.2	24.5
- Family, relative	21.3	13.9
- VCCT	13.5	13.1
- NGO staff	12.2	21.4

Perception about the benefits of ARV



Current Health Status

Characteristics	Total PLHIV (n= 1035)	
	Male (n = 418) %	Female (n = 617) %
Current health status		
- Good	4.6	30.6
- Fairly good/normal	87.0	60.9
- Not good	8.4	8.5
Health status compared to 6 months ago		
- Improved, much better	25.2	64.2
- Remain the same	63.8	26.8
- Poorer	11.0	9.0
Ever drink alcohol in the past 6 months	77.5	34.6

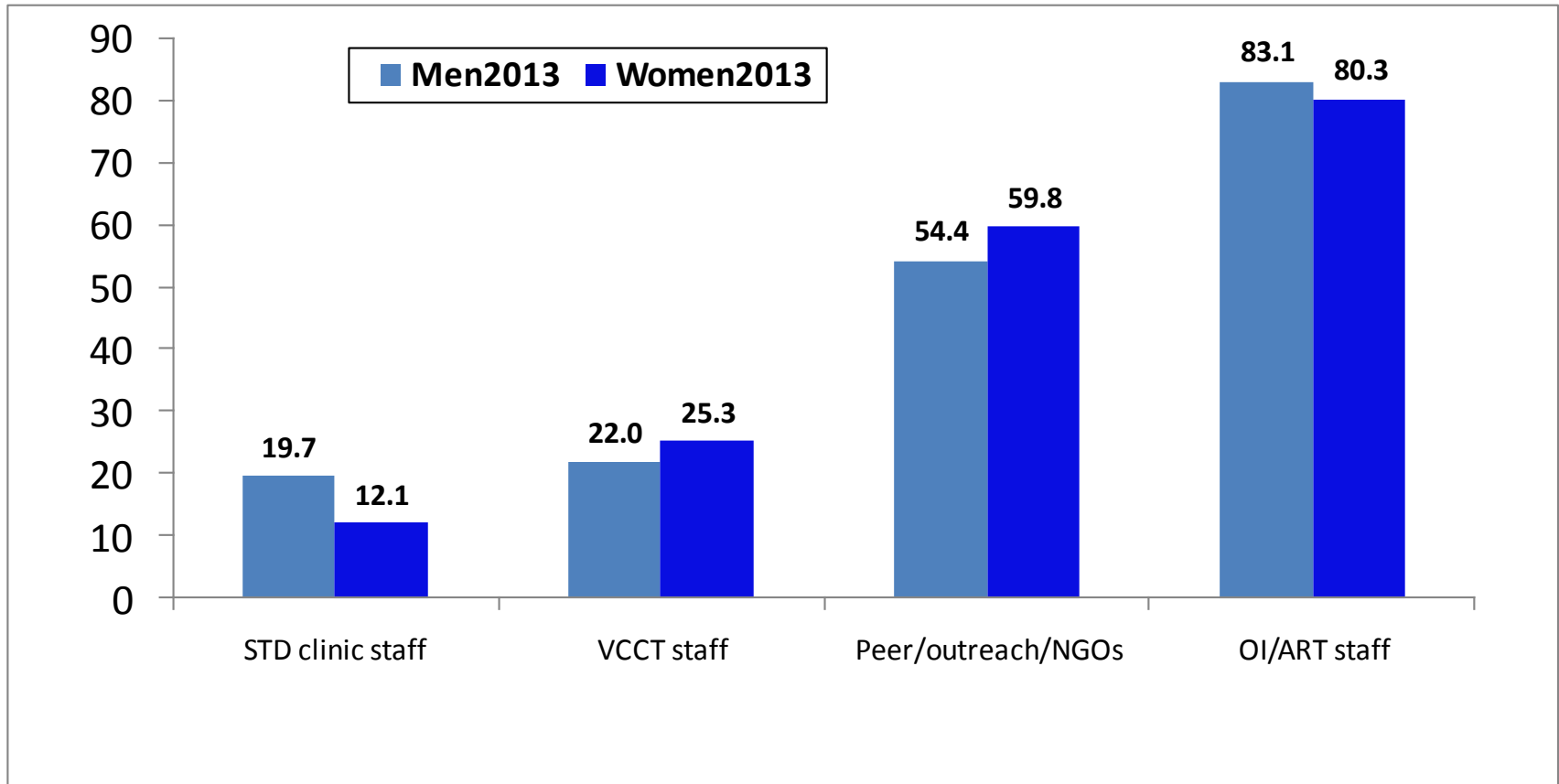
Sexual Behavior

Characteristics	2010 PLHIV(n= 895) %		2013 PLHIV(n= 1035) %	
	Male (n=358)	Female (n=537)	Male (n=418)	Female (n=617)
Ever had sex in the past 6 months	80.3	57.7	81.8	60.8
≥ one number of sexual partner in the past month	28.1	42.9	66.9	55.9
Mean number of sex with spouse in past month (median)	3(2)	3(2)	2 (1)	1.7 (1)
Having sweetheart in the past 6 months	6.2	4.9	5.3	5.0
Condom use during last sex with sweetheart	80	86.7	63.4	64.5
Always condom use with spouses past 6 months	76.4	71.2	69.6	62.7
Reason for not using condom with spouse				
- Want a baby	6.3	7.7	30.1	26.5
- Feel uncomfortable	6.7	9.9	32.3	44.4

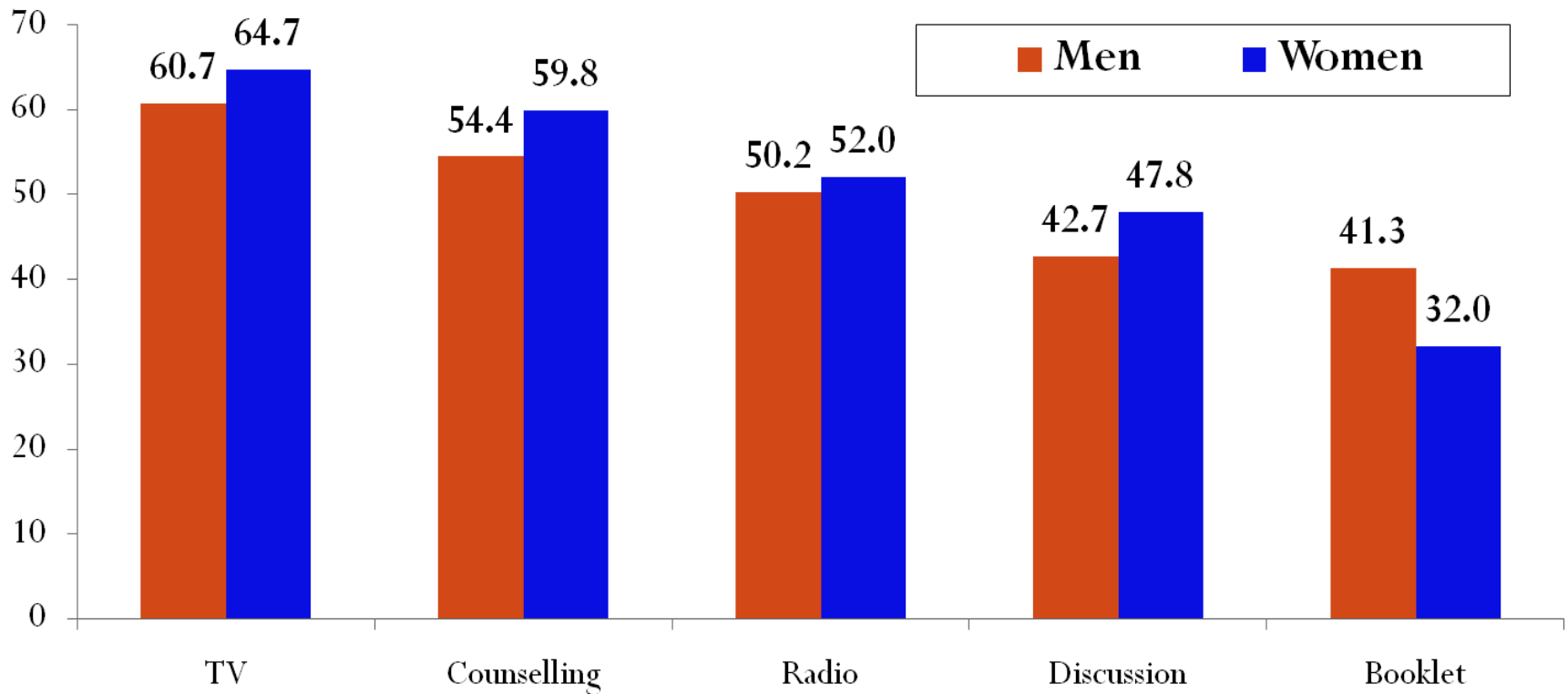
Commercial Sex (only men)

	2010 Male PLHIV (n = 358)	2013 Male PLHIV (n = 418)
	%	%
Ever paid to have sex in the past 12 months among those reported sexually active	10.9	14.4
Condom use last sex with sex worker (2010n=46 & 2013 n=44)	63	86.3
Consistent condom use with sex worker in the past 3 months (n= 21 & n=27)	66.7	92.3
Consistent condom use with sex work in the past year (n= 27 & n=39)	66.7	94.8
Ever had sex with casual partner in the past 6 months	3.4	5.3
Consistent condom use with casual partner in past 12 months	65.7	81.6
Ever had sex with men in the past year	1.3	3.4
Ever had condom breakage/slippage in the past year	4.5	12.4
Used lubricant in the last sex (in the past year)	12.6	12.7

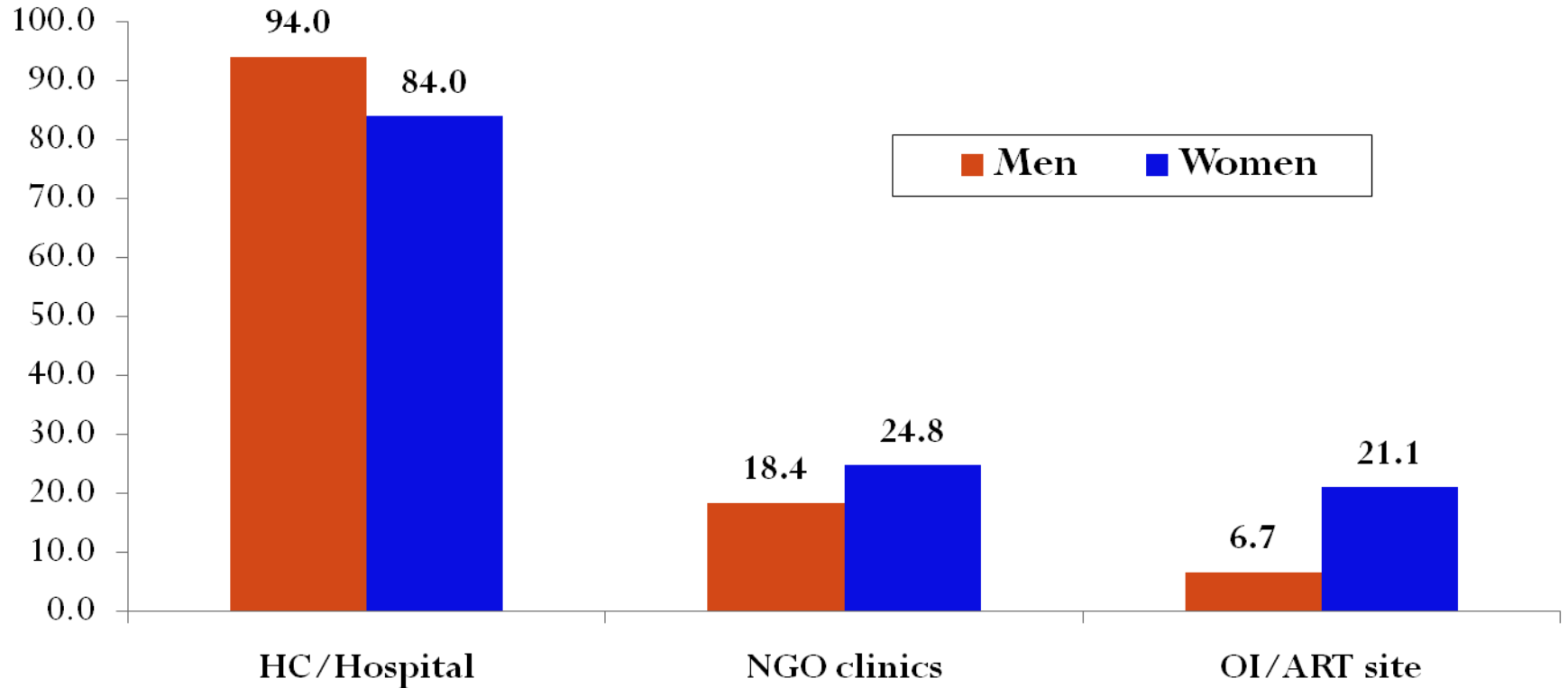
People provided information on HIV/AIDS, STI in the past 3 months



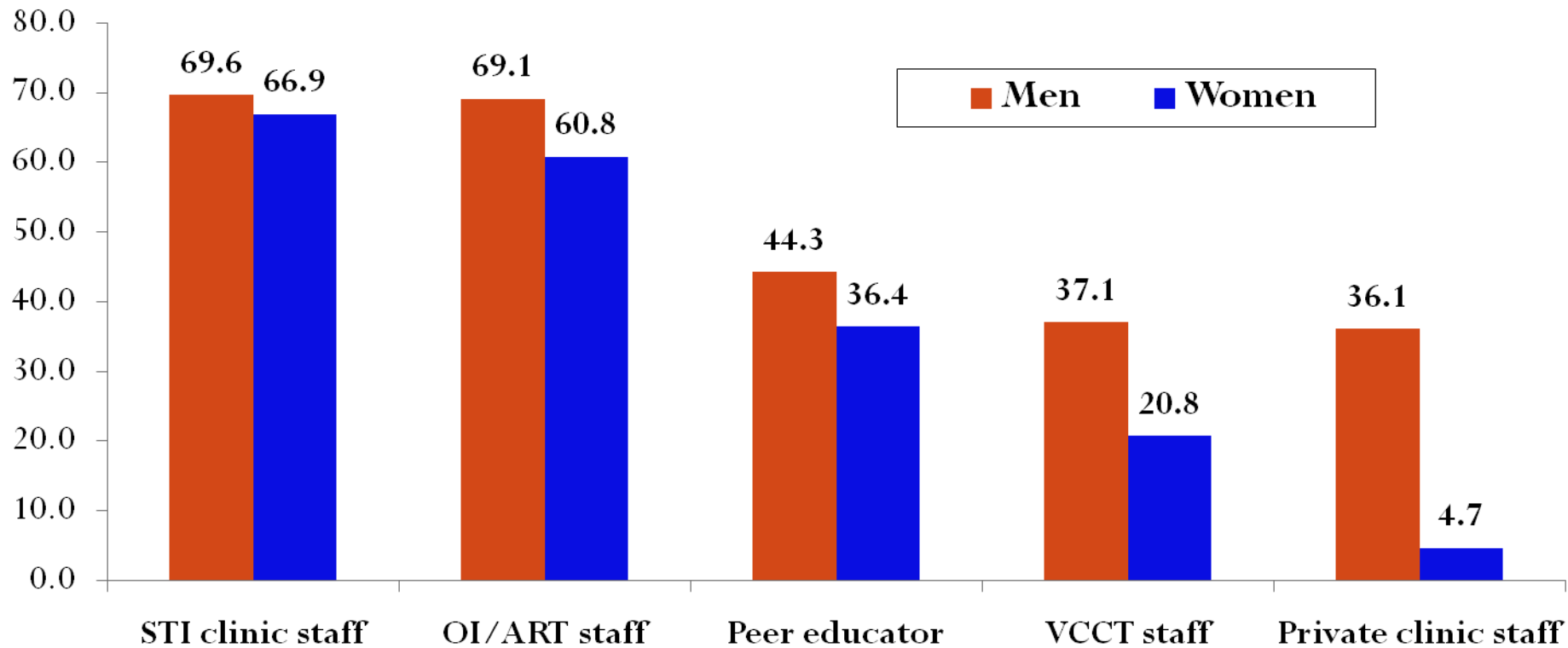
Preferred channels of information on HIV/STI for PLHIV



Places people could seek for FP services



People provided FP and SRH services to PLHIV



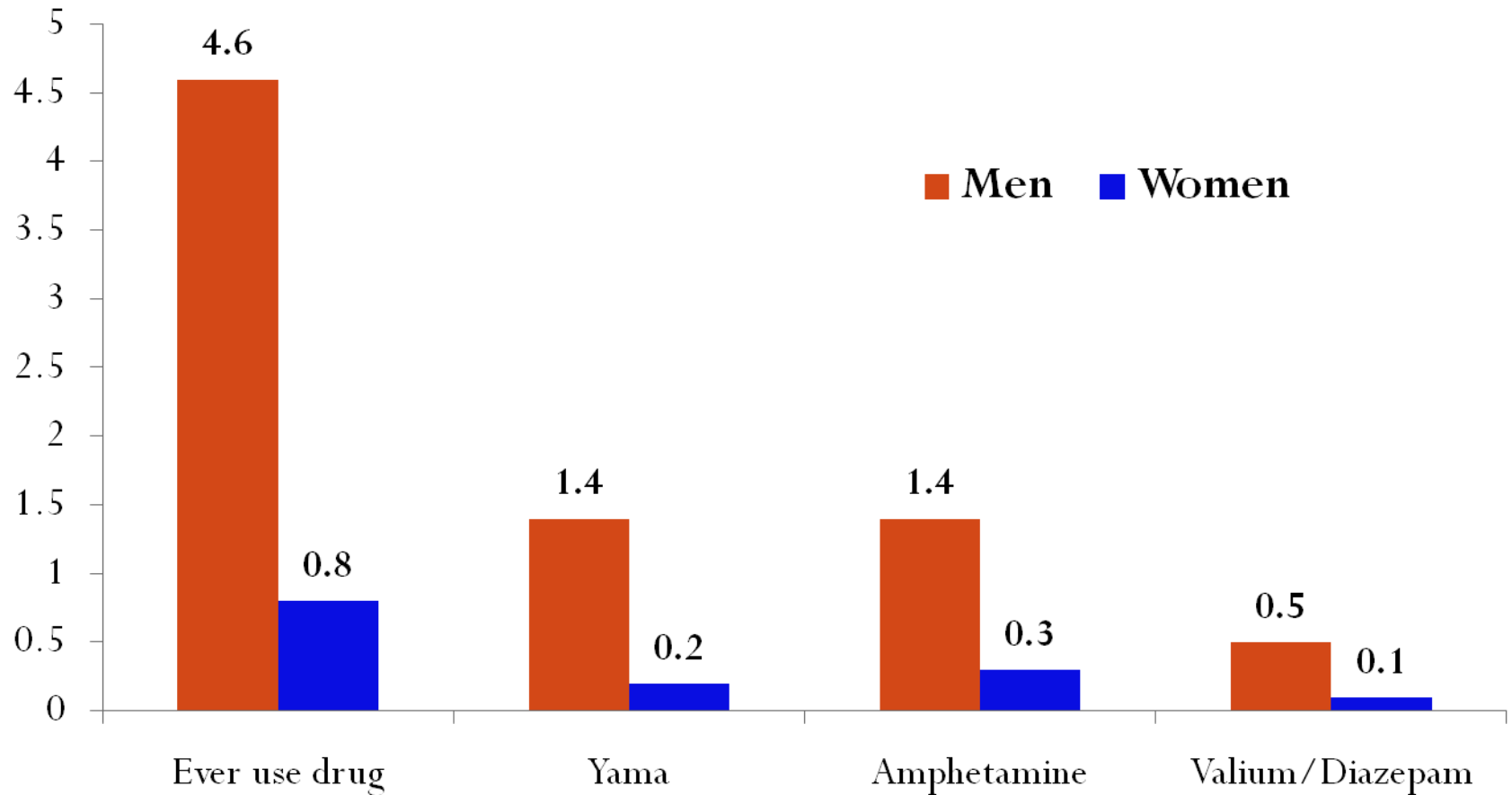
OI/ARV Service Usage and Adherence

Characteristics	2010		2013	
	Male (356)	Female (537)	Male (418)	Female (617)
	%		%	
Ever received ART counseling and properly use drug	98.3	97.8	98.1	97.6
Adhere to appointment keeping	98.3	96.6	95.9	97.7
Ever quit one site before starting a new one (as a new patient)	8.1	12.5	6.7	8.9
Ever borrowed OI/ARV from other PLHIV	2	2	2.7	3.4
Currently received OI/ARV from at least 2 sites at the same time	0.6	2.1	3.6	1.0

Other Health Service Usages

Characteristics	2010		2013	
	Male (n = 356)	Female (n = 537)	Male (n = 418)	Female (n = 617)
≥ One pregnant after being known the spouses (+)	18.5	28.2	33.3	33.7
≥ One abortion after being known the spouses (+)	5.5	11.7	7.0	13.8
Ever use PMTCT service after being known the spouse (+)	63.1	63.3	62	64.8
Use contraceptive after being known HIV positive				
- Never use any contraceptive	1.7	11.2	10.5	21.4
- IUD	7.6	2.2	3.7	2.2
- Pill	12.1	3.9	7.9	5.3
- Condom	75	53.6	83.1	63.7
Ever received info. about FP, SRH and safe abortion	80.5	72.4	66.4	69.7
Ever use STI services in past 12 months after being known positive	14.8	32.7	6.0	23.0
Ever being referred to have TB screening	68.6	58.2	79.0	70.7

Drug Use and Drug Types



Conclusions: PLHIV (1)

- This round the proportion of OI patients become small (5.4%)
- Data suggest that 40% of PLHIV were men and about 60% were women
- Data showed that their positive HIV status had been often confirmed at VCT and hospital
- Women tended to disclose their status to spouses lower than men. This should be well addressed for positive prevention
- Currently, close to 94% of PLHIV are on ART
- Their spouses remained HIV negative was 25.8% (men reported higher discordance)- a room to focus on positive prevention
- This round PLHIV's knowledge about ARV use become high

Conclusions: PLHIV (2)

- Most PLHIV acknowledged that their health return to normal or it had been **improved much better** since they started receiving OI/ART
- Majority of OI/ARV patients returned to be sexually active (61%-81%), reported ever had sex in the past 6 months.
- Consistent condom use with their spouse was about 63%
- 14.4% of male PLHIV reported paid sex in the past 12 months. However, condom use with paid sexual partners was > 90%

Conclusions: PLHIV (3)

- On average about 7% of participant reported starting at a new OI/ART site (as a new patient) after stop receiving ART from another ART site.
- Report of adherence to appointment keeping was high (>95%)
- OI/ART staff have been considered as sources of many health related information, ranging from OI/ARV to family planning and other reproductive health.
- Less than 5% of PLHIV ever experience using drug. However, non reported injecting drug.

Conclusions: PLHIV (4)

- STI clinic staff and OI/ART staff played a major role in providing FP and SRH services to PLHIV
- Still more than one third of female PLHIV reported more than one time pregnancy even after being known the spouses were positive
- About half of the female PLHIV report using PMCTC service
- 10% and 20% of male and female PLHIV reported never using any contraceptive after being known their status
- > 70% was being referred for TB screening

Recommendations: PLHIV

- High proportion PLHIV on ART must be maintained so keep their good health condition at the best
- One in four of PLHIV couples reported to be discordant, which indicate the importance of treatment as prevention and positive prevention among couples.
- Also consistent condom use as a prevention measure should be strongly addressed since about 35% of them did not use it consistently both men and women.

Thank you