

HIV Prevalence among Drug Users 2007 in Cambodia

National Center for HIV/AIDS, Dermatology and STD
14 November, 2008

Presented by: [Dr. Mun Phalkun](#), Surveillance Unit





Outline

- Background
- Objectives
- Methodology
- Results:
 - Drug use behavior
 - Sexual behavior and access to health services
 - HIV prevalence
- Conclusions
- Recommendations



Background

- The HIV/AIDS epidemic in Cambodia is currently stable with an estimated HIV prevalence among the general population aged 15 – 49 years old of 0.9% in 2006
- However, high HIV prevalence is still observed in high risk groups, such as female sex workers (14.7%) and men who have sex with men (5.1%)
- The burden of HIV/AIDS epidemic on drug users, also one of the most at risk populations, has not been comprehensively investigated
- Sharing injecting materials and having multiple sexual partners or unprotected sex may put drug users at great risk of HIV transmission.



Objectives

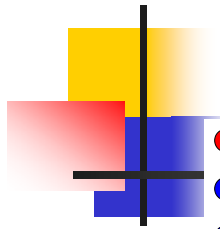
- To estimate HIV prevalence among drug users (IDU and non IDU) in rehabilitation centers and in communities
- To investigate knowledge, attitude and practices regarding drug use, HIV transmission, STI treatment, HIV testing and other health services
- To provide information for designing appropriate HIV/AIDS prevention programs targeting drug users



Methodology

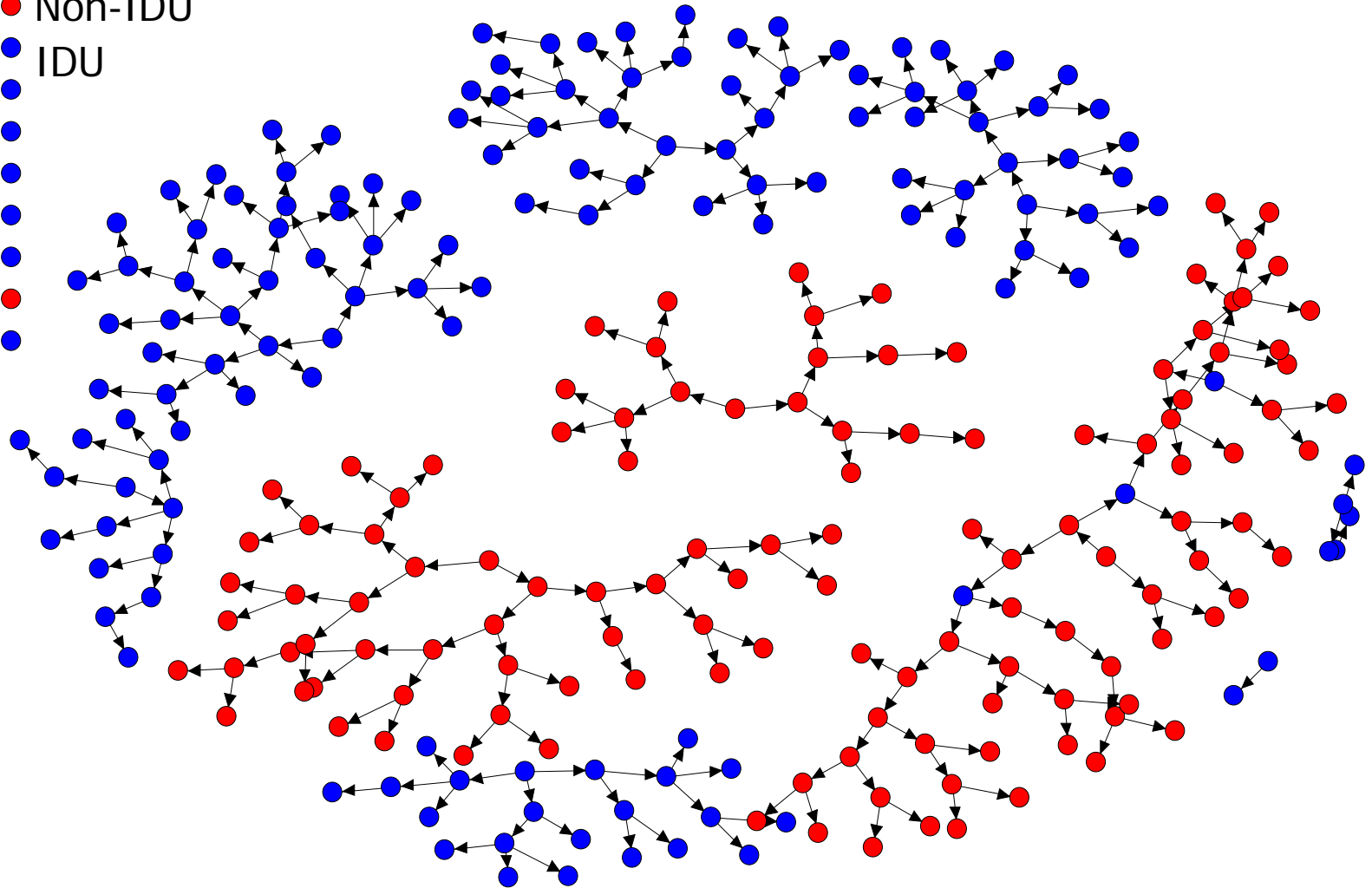
- Study type: Cross sectional study
- Study population
 - Drug users in 11 rehabilitation centers in 4 cities/provinces (Phnom Penh, Siem Reap, Battambang, Banteay Mean Chey)
 - Drug users in community (Phnom Penh)
- Sampling
 - Probability Proportionate to Size (PPS) was used to recruit drug users in rehabilitation centers
 - Respondent Driven Sampling (RDS) was used to recruit drug users in the community in Phnom Penh. **Korsang** and **Mit Samlanh** sites were used for interviews
- Sample size
 - Drug users in rehabilitation center: 240
 - Drug users in community: 260 (140 IDU and 120 non IDU)
- Data and specimens collected from July to October 2007
 - Blood collected on Dried Blood Spot (DBS) from finger prick in addition to face to face interview using a structured questionnaire.

Recruitment patterns using RDS



● Non-IDU

● IDU





HIV Laboratory testing

- Blood collected on DBS was sent to NIPH lab
- At NIPH, serial HIV testing using 2 EIA (first Vironostika and Murex if reactive to first test)
- Quality control testing was conducted at NIPH using Genetic systems HIV 1 Western Blot: all tests results were concordant to EIA



Data management and analysis

- Data was double-entered using Epidata
- RDS software was used to analyze HIV prevalence for Drug User (DU) recruited through RDS
- STATA version 10 was used for behavioural data and for DU recruited at rehabilitation centers

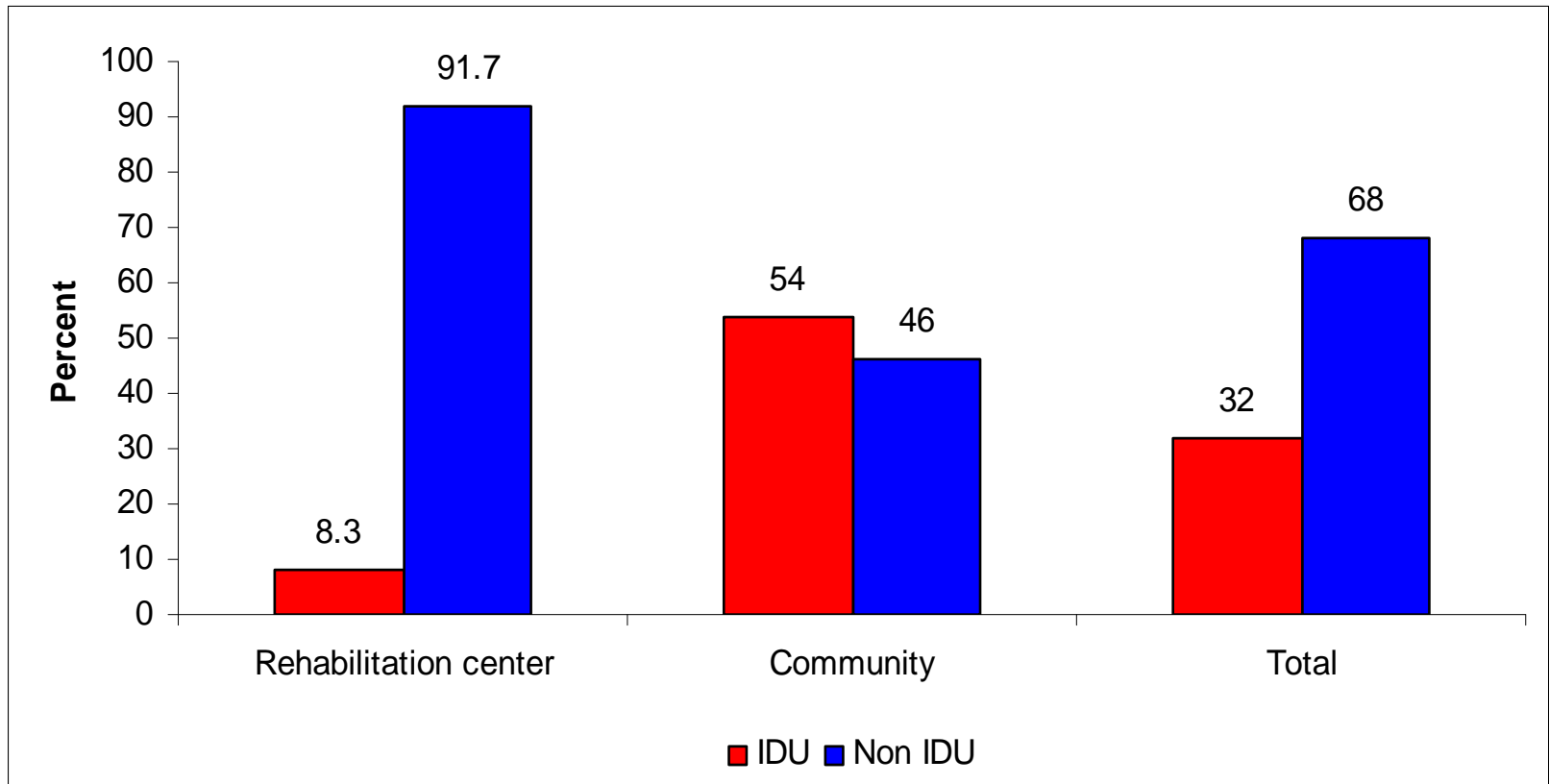


Results – Distribution of study participants

Province	DU in Rehab		DU in community		TOTAL
	IDU	non IDU	IDU	non IDU	
Battambang	1	51			52
B. Meanchey	6	76			82
Siem Reap	1	12			13
Phnom Penh	13	92	149	127	381
TOTAL	21	231	149	127	528

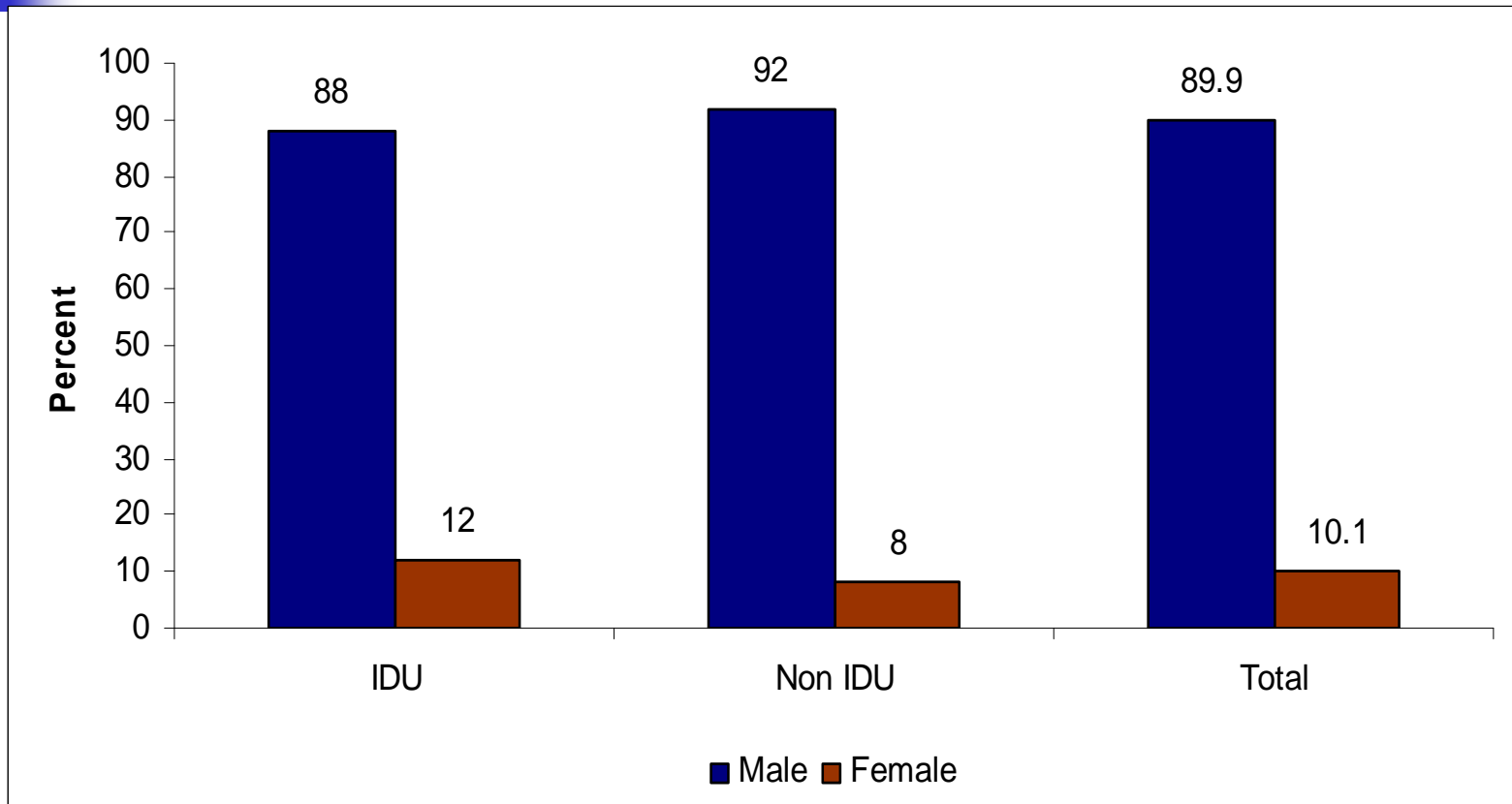
Results – Characteristics of the study participants

Distribution of type of drug use



Note: in community we intentionally recruited more IDU

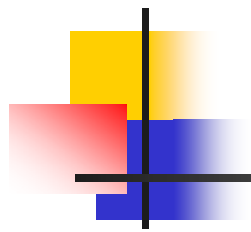
Results – Gender of participants recruited from community



Note: there is no female drug user recruited from rehabilitation centers (28 recruited from community in Phnom Penh)

Results – Socio-demographic characteristics

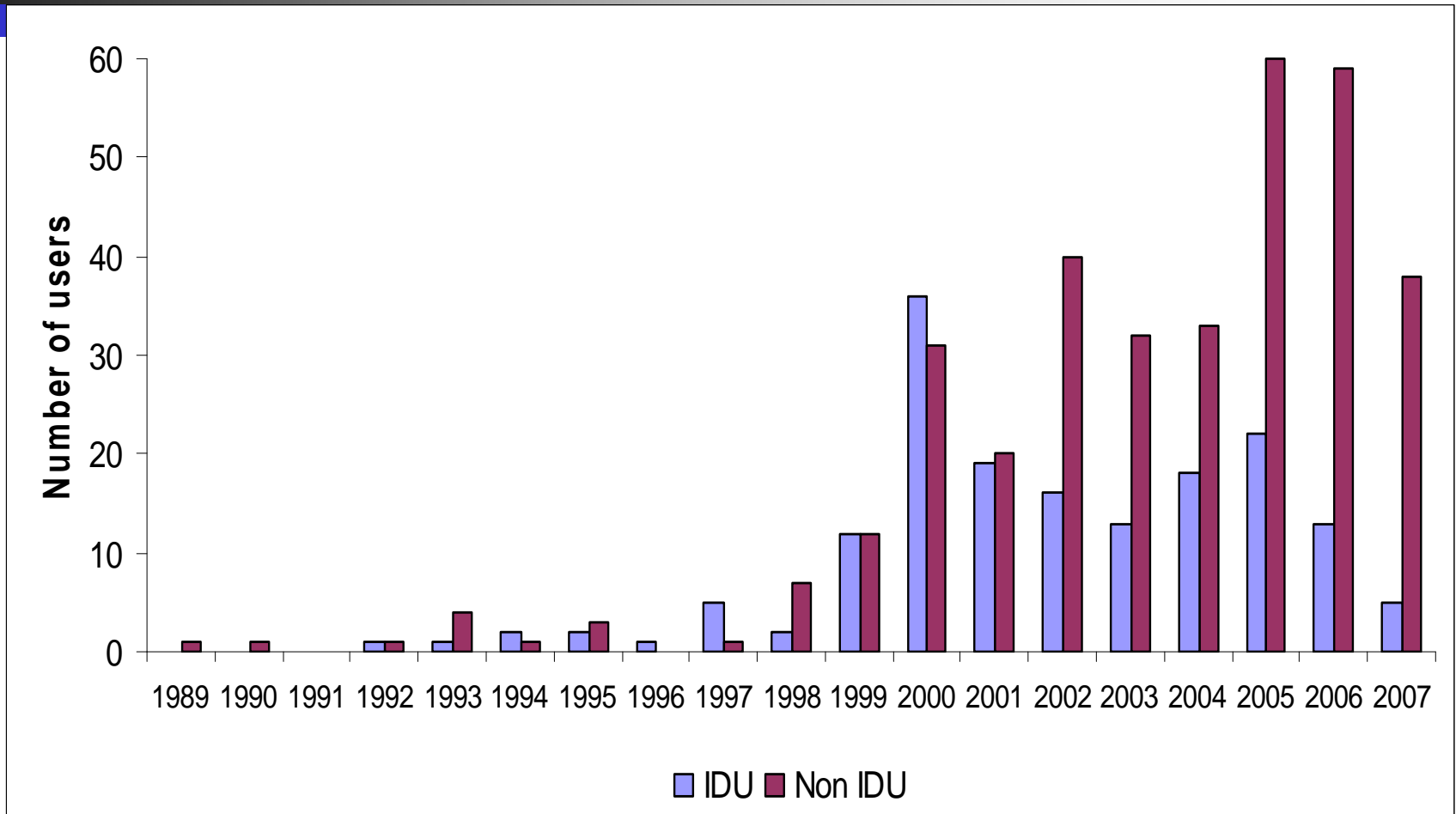
	Rehab		Community		Total	
	IDU	Non IDU	IDU	Non IDU	IDU	Non IDU
Male (%)	100.0%	100.0%	87.9%	92.1%	89.4%	97.2%
Mean age (median)	23.3 (23)	22(22)	24.7 (23)	21 (20)	24.5 (23)	21.7 (21)
Percent of no schooling	14.3%	6.0%	39.6%	14.2%	36.5%	8.9%
Mean year of schooling (median)	6.7 (7)	8.9 (9)	5(5)	6 (6)	5.3 (5)	7.9 (8)
Places usually stayed						
On street	9.5%	7.4%	76.4%	61.4%	68.0%	26.5%
Relative/parents	71.4%	79.6%	8.1%	12.6%	16.0%	56.0%
Own house	4.8%	8.7%	8.8%	14.2%	8.3%	10.6%
Other	13.3%	4.3%	6.8%	11.8%	7.7%	7.0%
Mean age at first marriage (median)	21 (21.1)	23(23)	21(20)	20(20)	21(20)	21.7 (22)
Percentage of not married	66.6%	89.7%	81.8%	84.3%	79.9%	87.8%



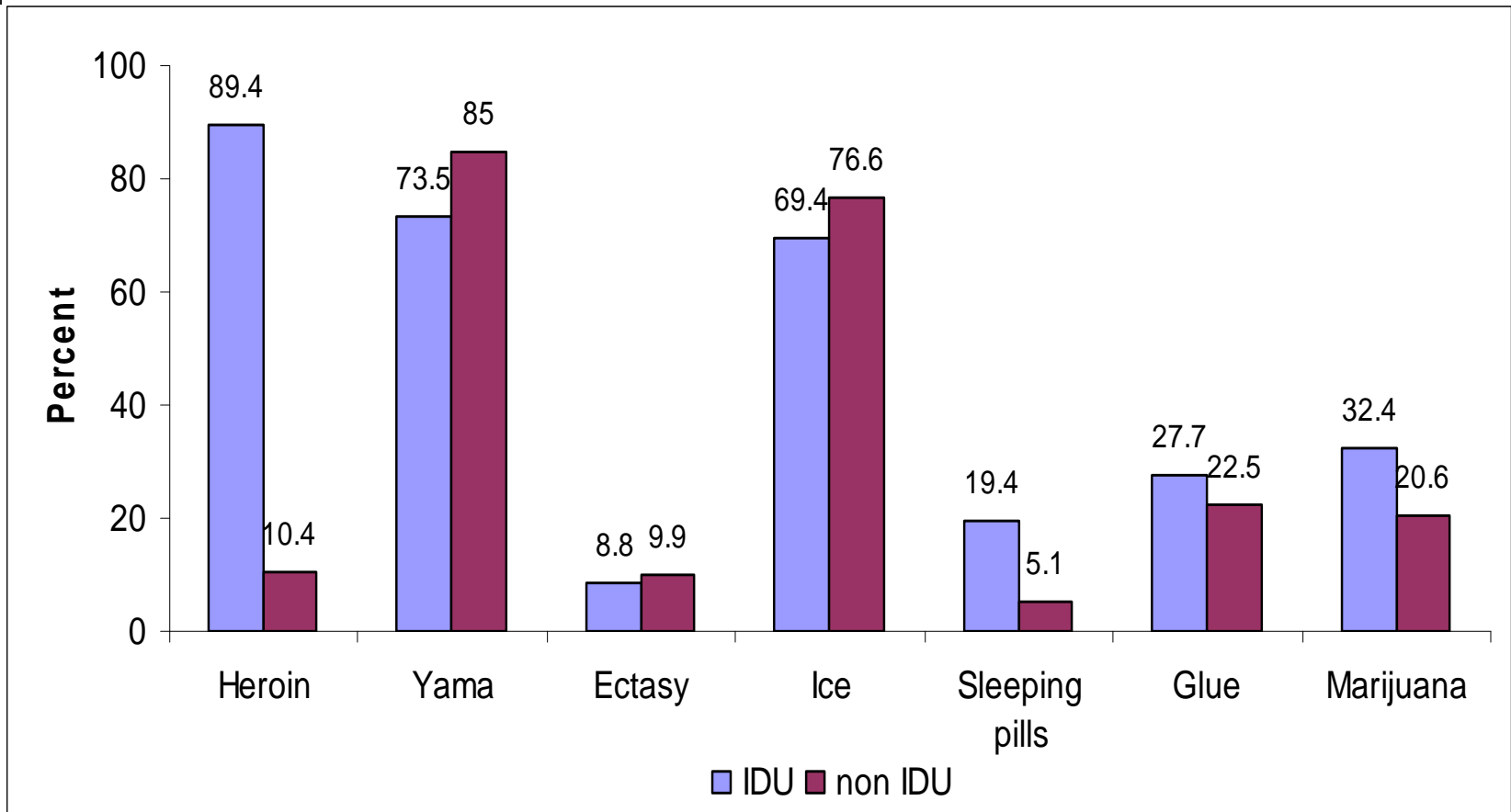
Results:

Drug use behavior

Results – Drug use history



Results – Types of drug use

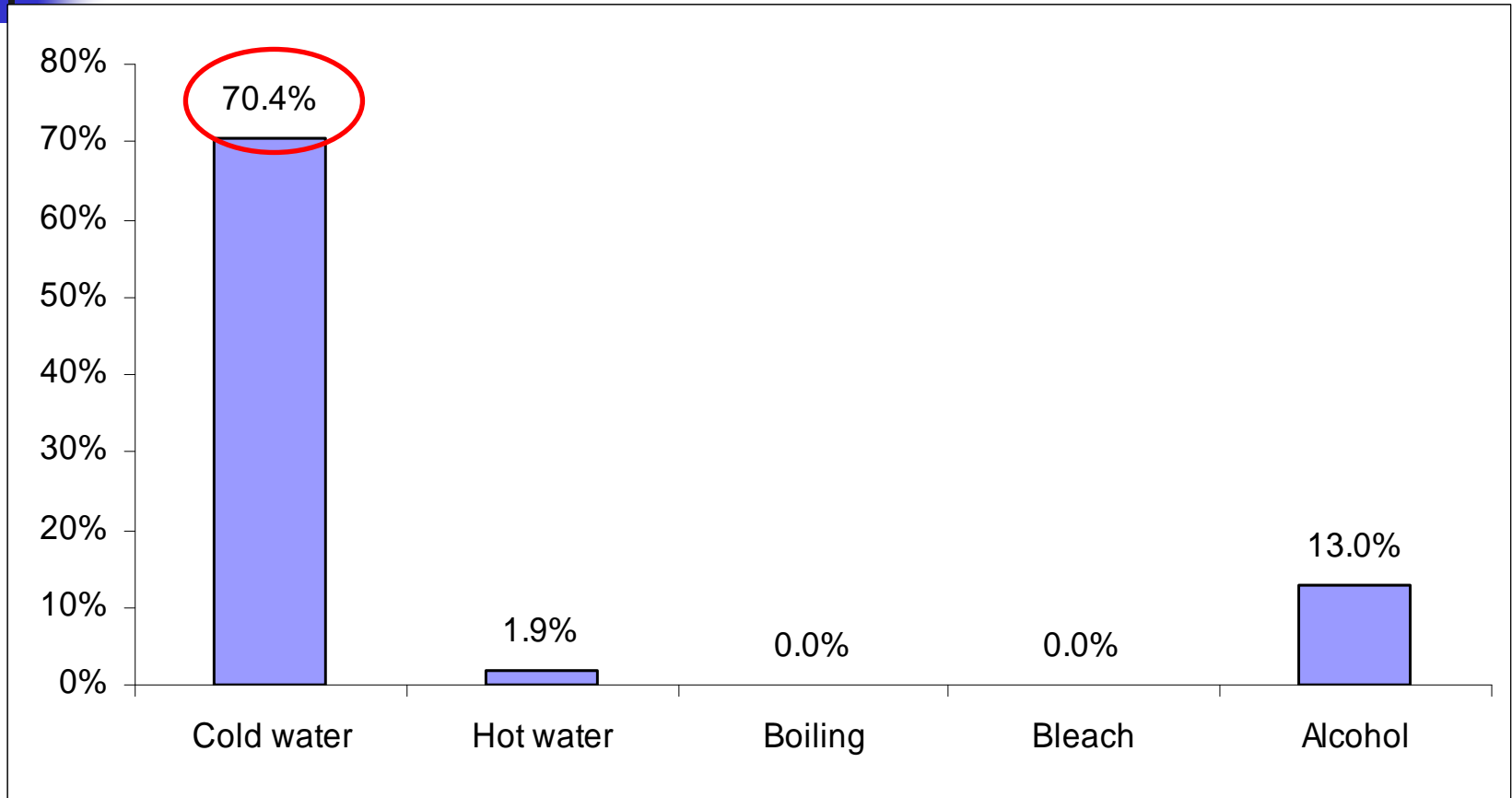


Results – Sharing needles and syringes among IDU

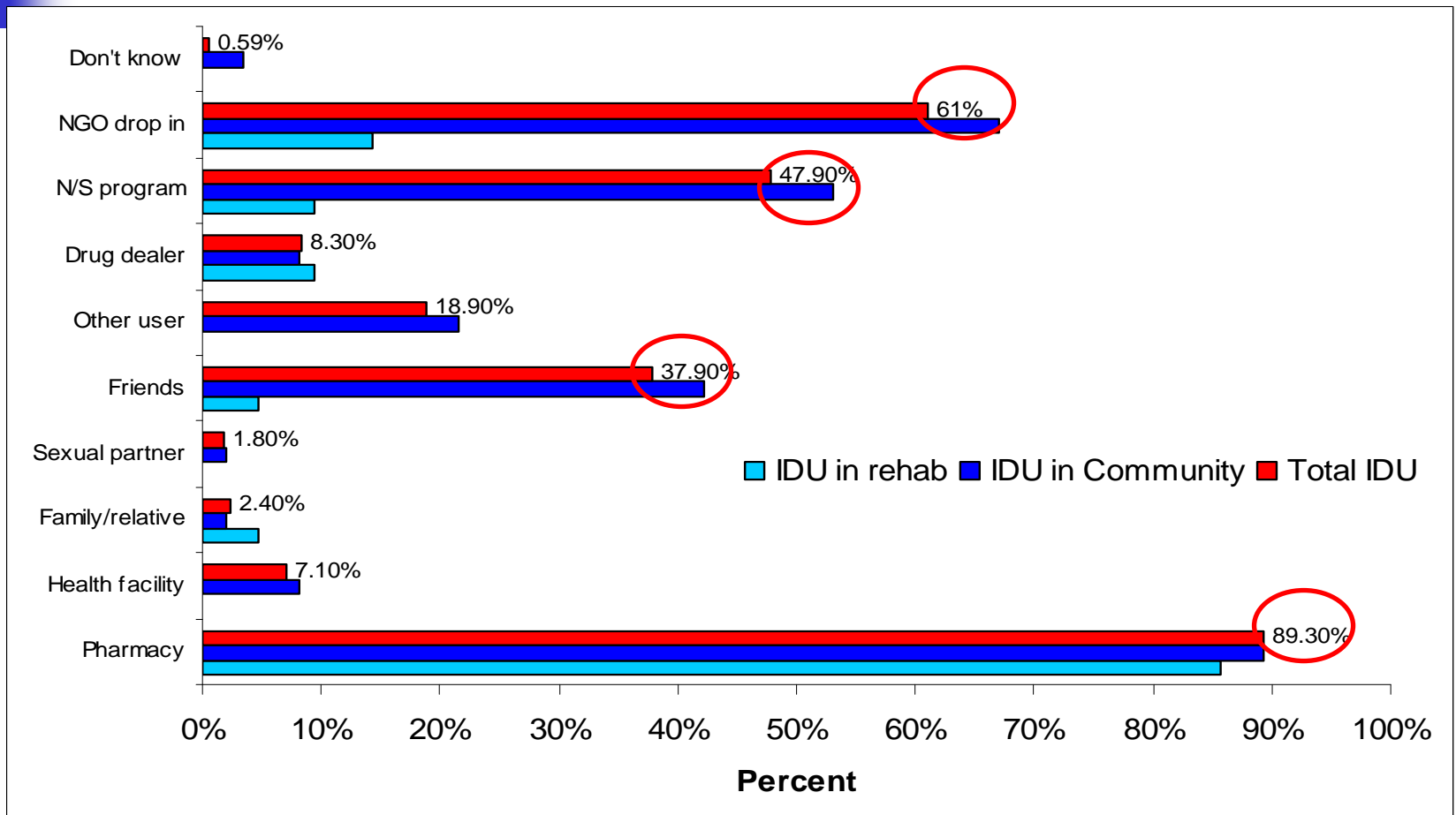
	IDU in rehab	IDU in Community	Total
	n=21	n=149	n=170
Sharing needles and syringes last time injected drug	45.5%	33.6%	35.5%
Never used used syringes and needles in the last month	71.4%	65.5%	66.3%
Always clean or using only new needles and syringes in the last month	72.7%	73.9%	73.5%
Never injected drugs using a syringe after someone else had put drugs into it from his/her used syringe	54.6%	71.1%	69.8%
Never shared a cooker/vial/container, cotton/filter, or rinse water when injecting drug in the past month	45.5%	51.0%	50.3%
Never injected drugs which had been dissolved in someone else's blood in the past month	59.0%	76.5%	74.0%

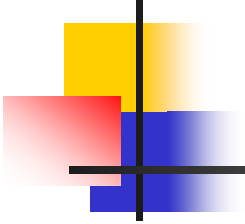
Note: Drug user in rehab was asked for the period prior to their admission to rehab

Results – Methods for cleaning needles and syringes



Results – Places to get clean needles and syringes





Results:

sexual behavior and access
to health services

Results – Sexual history

	Rehab		Community		Total	
	IDU	Non IDU	IDU	Non IDU	IDU	Non IDU
Ever had sexual intercourse	85.7%	83.6%	90.6%	81.1%	90.0%	82.8%
Mean age at first sexual intercourse (median)	18.1 (18)	17.8 (18)	18(18)	17.8(18)	18 (18)	17.8 (18)
Had sexual intercourse in the past year	85.7%	76.7%	67.8%	71.7%	70.0%	75.0%
Ever had male sexual partner (for male only)	19.1%	3.5%	16.7%	18.8%	17.0%	8.6%
Had sex with male partner in the past year (for male only)	14.3%	2.2%	16.1%	16.5%	15.9%	7.2%
Had sex after using drug in the past year	66.7%	70.8%	51.0%	63.4%	53.3%	68.5%
Drug consumption leads to desire to have sex	53.3%	80.8%	85.5%	88.5%	78.6%	83.3%

Results – Condom use with non-paying sexual partners

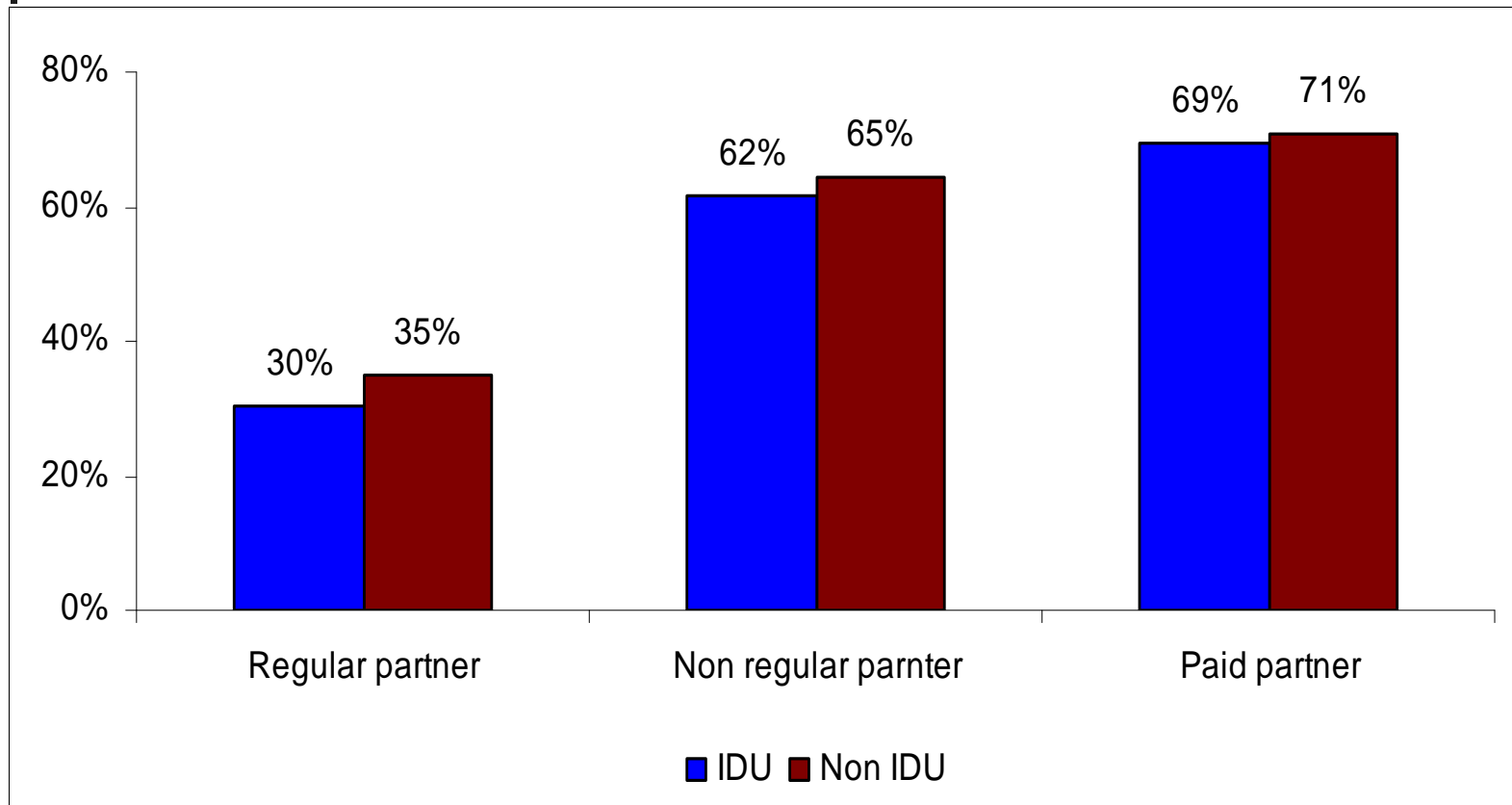
	Rehab		Community		Total	
	IDU	Non IDU	IDU	Non IDU	IDU	Non IDU
Using condom last time having sex with regular partner	33.3%	52.7%	41.5%	53.3%	40.2%	52.9%
Always condom use when having sex with regular partner in the past year	22.2%	32.7%	32.1%	39.7%	30.3%	35.0%
Using condom last time having sex with non regular partner	62.5%	87.8%	69.1%	64.3%	68.0%	80.5%
Always use condom with non regular partner in the past year	40.0%	69.0%	66.7%	53.2%	61.7%	64.5%

28 Female DU were excluded

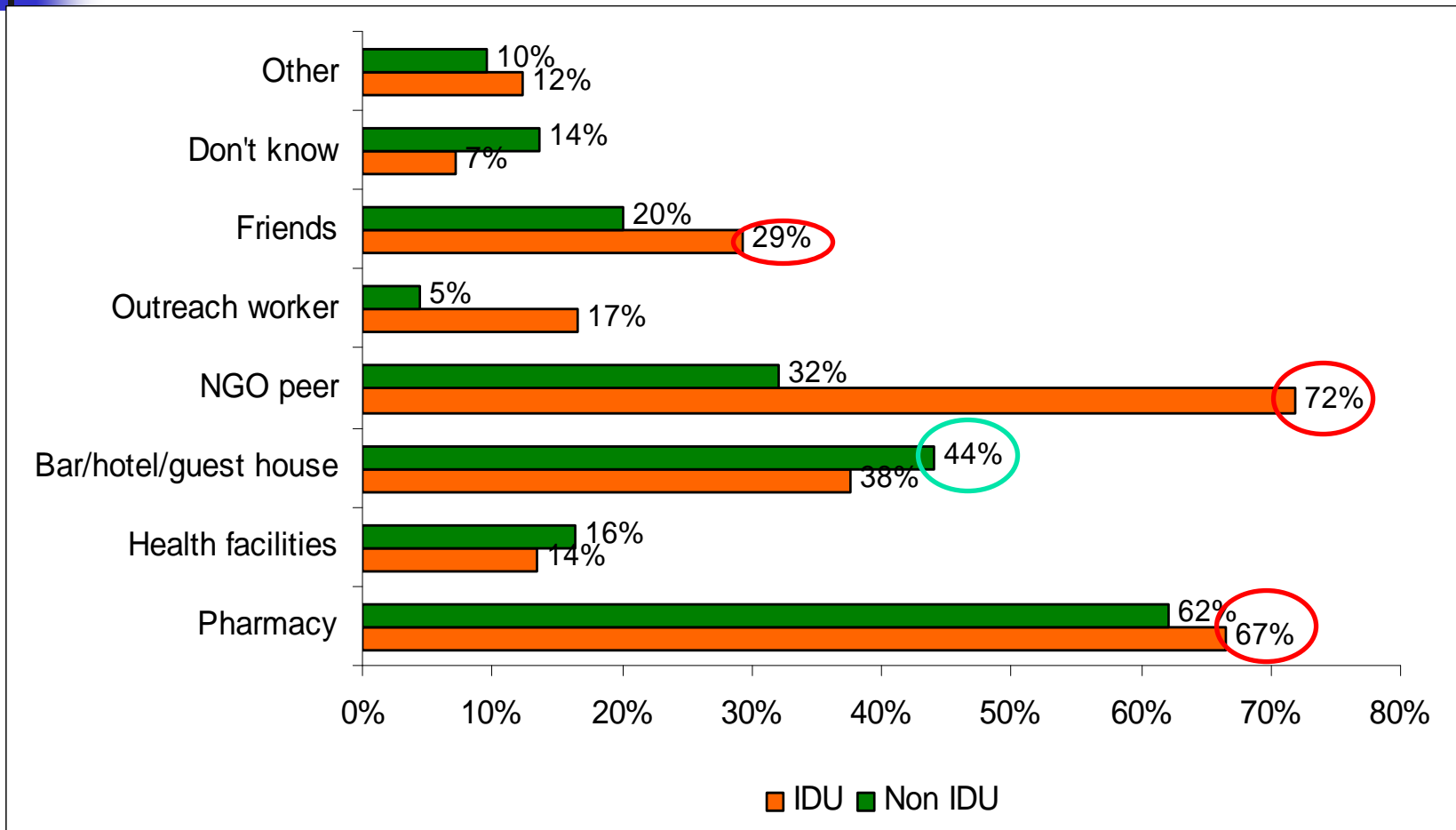
Results – Condom use with paid sexual partners

	Rehab		Community		Total	
	IDU	Non IDU	IDU	Non IDU	IDU	Non IDU
Mean number of paid sexual partner in the past month (median)	3.1(2)	5 (3)	2.8(2)	2.8 (2)	2.8 (2)	4.3 (3)
Condom use last time had sex with paid sexual partner	71.4%	89.0%	83.3%	86.8%	81.4%	88.4%
Always condom use with paid sexual partner in the past year	35.7%	69.8%	77.0%	72.6%	69.3%	70.6%
Types of commercial sex partner						
Brothel based female sex worker	42.9%	50.6%	51.9%	49.1%	50.6%	50.1%
Street based female sex worker	4.8%	13.3%	16.0%	16.4%	14.5%	14.3%
Beer girl/karaoke girl/massage girl/beer garden girl	28.6%	36.9%	8.4%	8.6%	11.2%	27.5%
Other	14.3%	7.3%	2.3%	2.6%	3.9%	5.7%

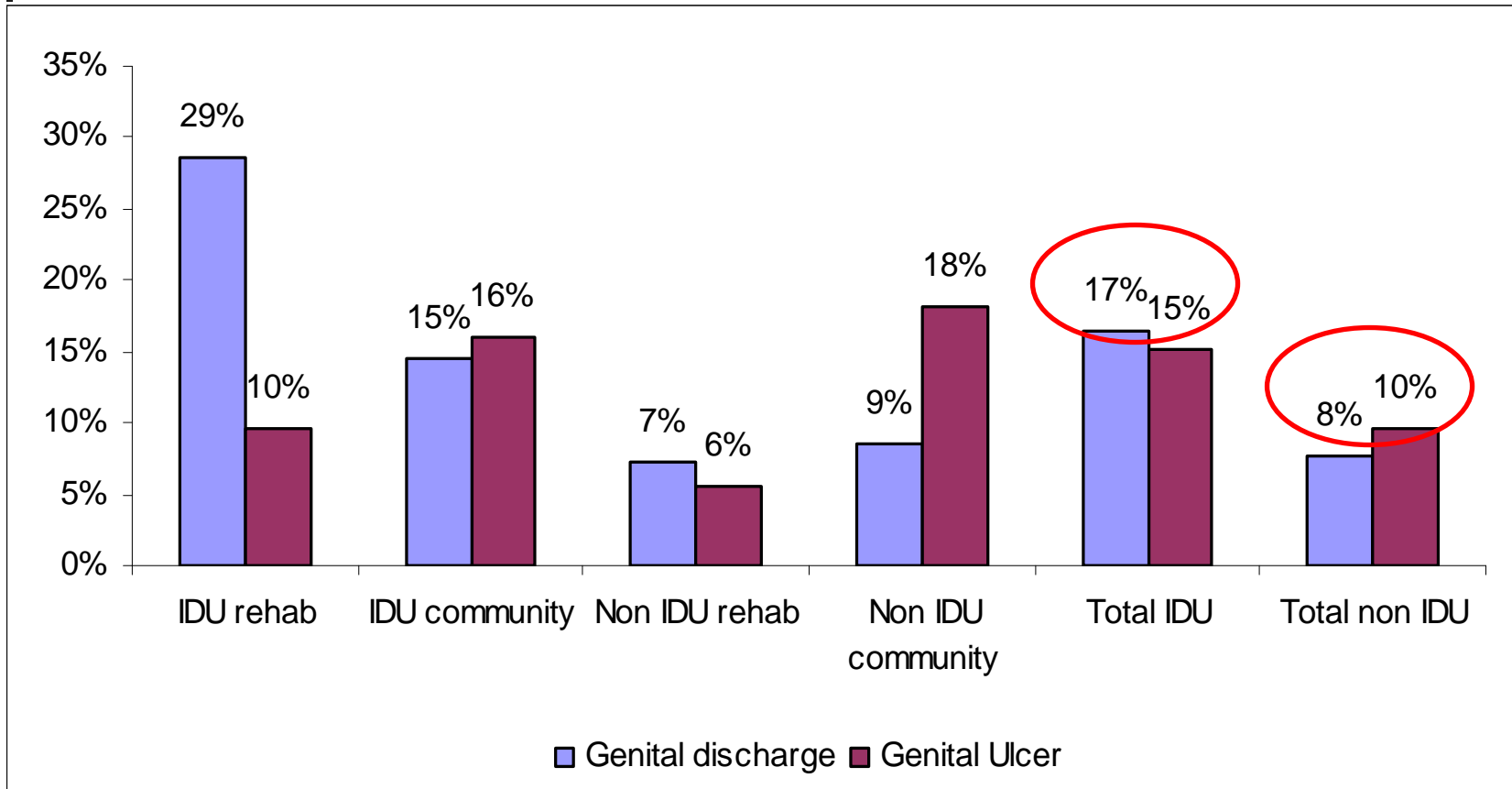
Results – Always used condoms in the past year, by types of partners



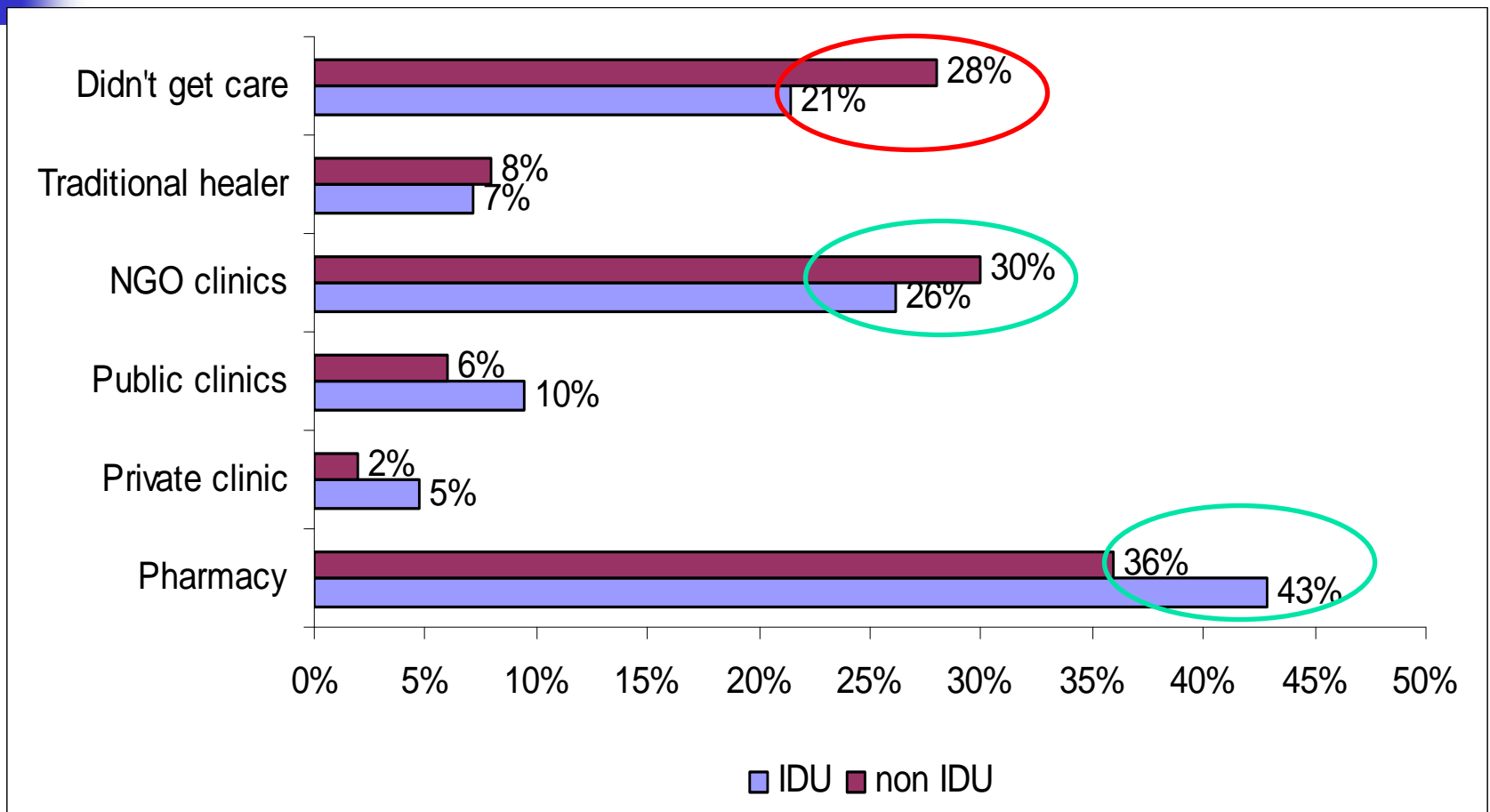
Results – Places where drug user can get condom



Results – Reported STI symptoms in the past year



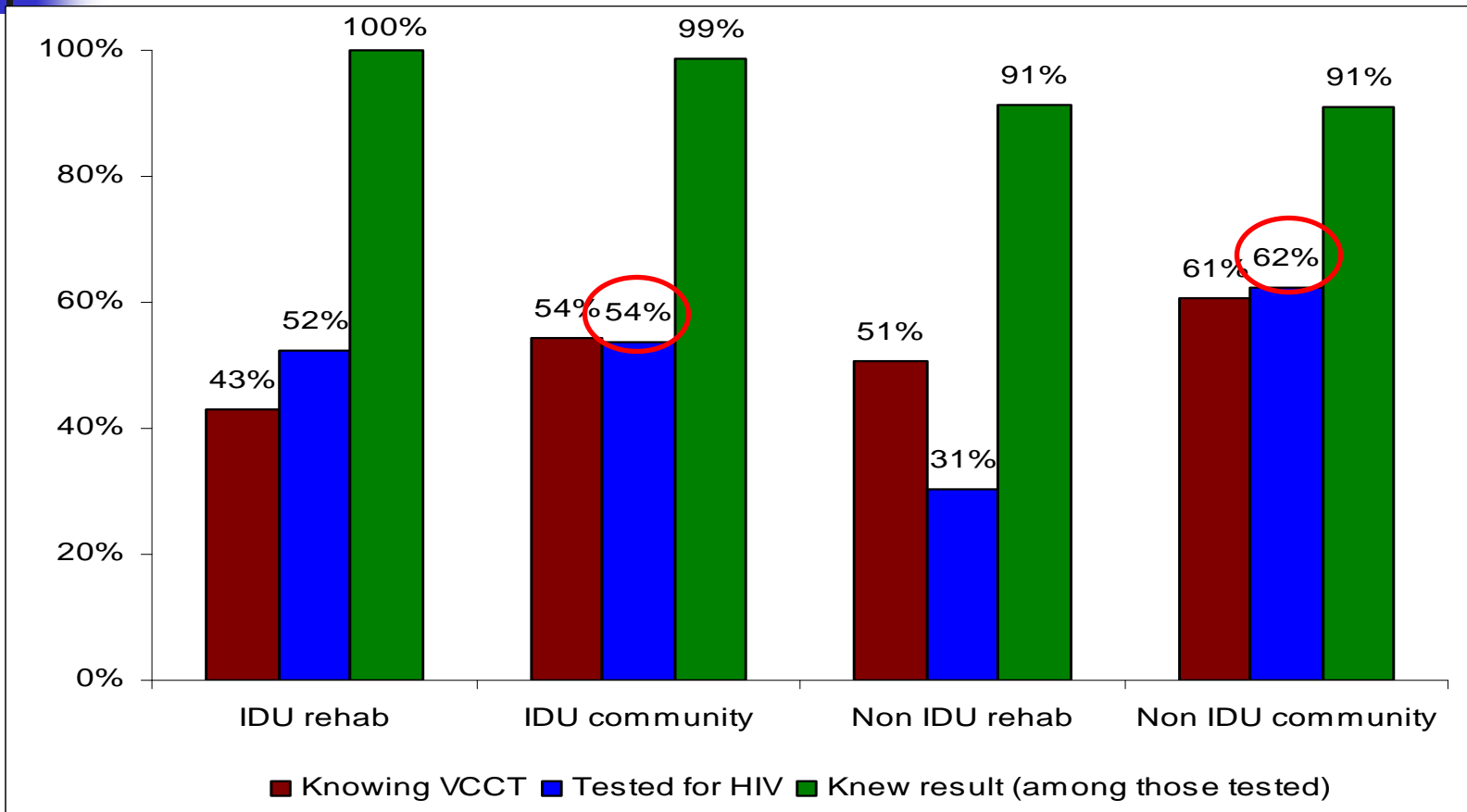
Results – Places where drug user sought for treatment of their last STI symptoms



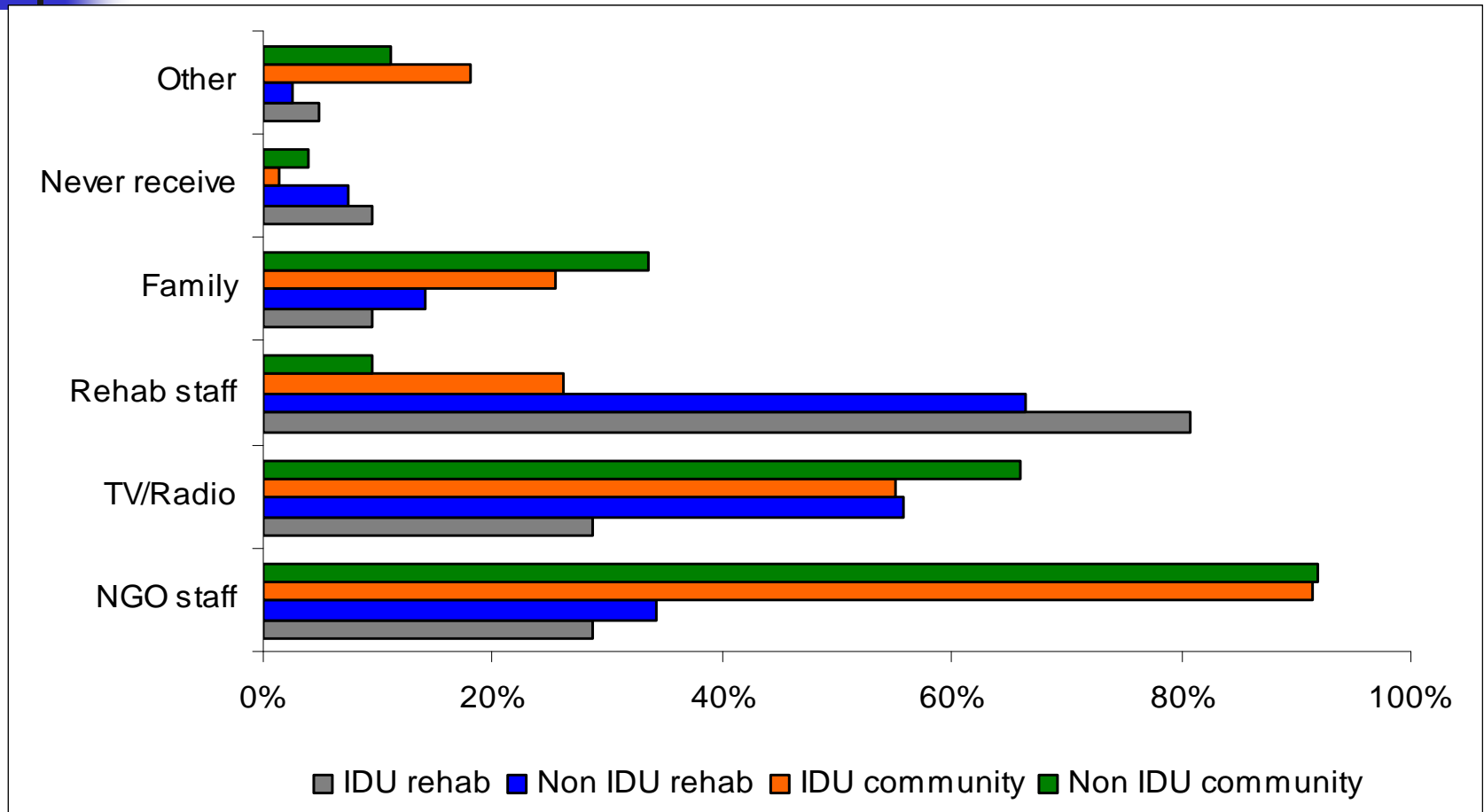
Results – Knowledge about HIV/AIDS prevention and care

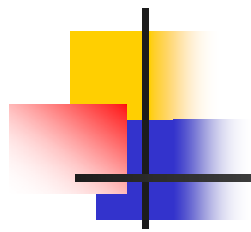
	Rehab		Community		Total	
	IDU	Non IDU	IDU	Non IDU	IDU	Non IDU
Properly use condom can prevent transmission	71.4%	79.4%	88.6%	89.6%	86.5%	83.0%
Using used needles syringes can get infected	71.4%	83.6%	77.2%	62.1%	76.5%	76.1%
Knowing there is health facilities providing ART	28.6%	41.2%	41.2%	45.7%	39.6%	42.8%
Believed they can get ART if needed	19.0%	43.8%	53.7%	63.8%	49.4%	50.8%

Results – VCCT usage



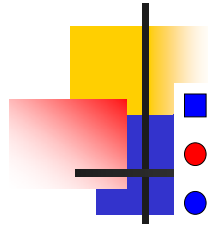
Results – Sources of HIV information



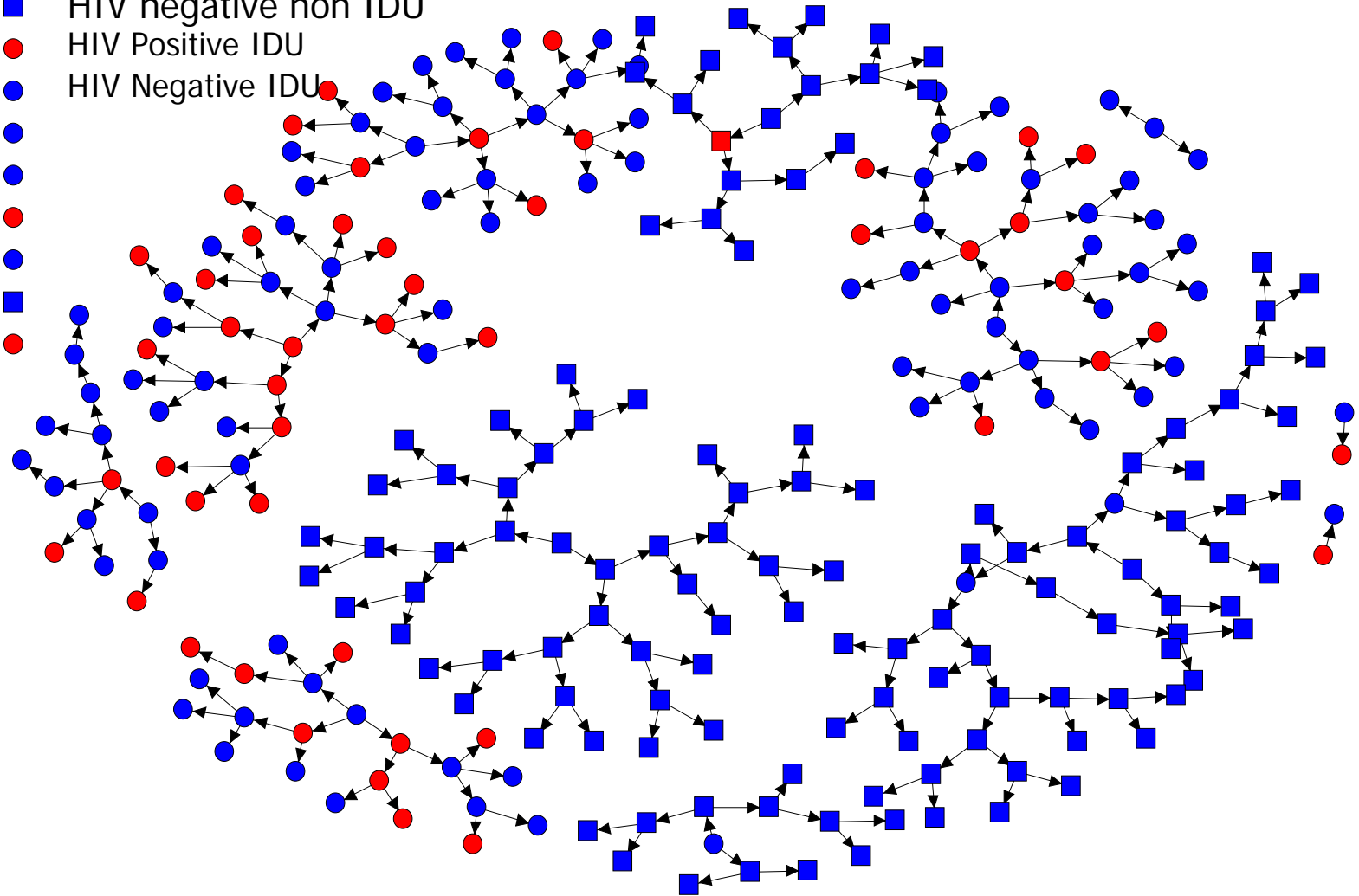


HIV Prevalence

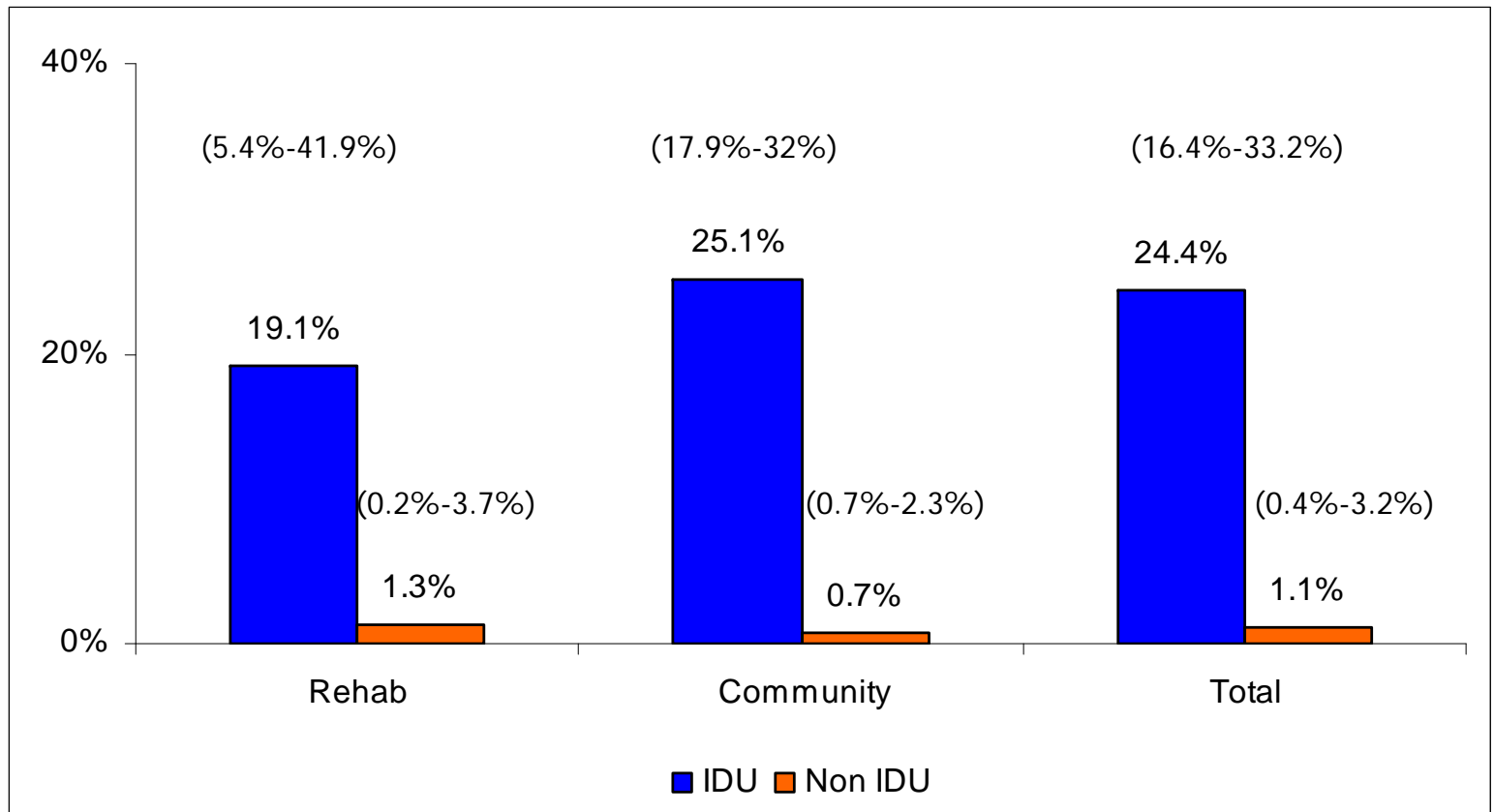
Patterns of Sero-positive



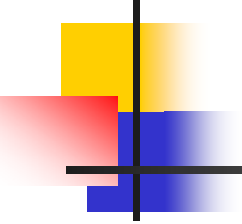
- HIV negative non IDU
- HIV Positive IDU
- HIV Negative IDU



Results – HIV prevalence by drug use

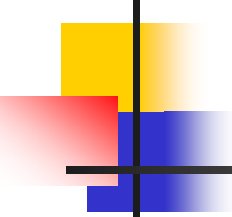


Note: there were 6 HIV+ among 27 women drug users recruited from community



Conclusions – DU survey

- Drug use has become common since 2000
- One third of IDU reported sharing needles and syringes last time they injected drug
- One fourth of IDU reported injecting drugs that were dissolved in someone else blood in the past month
- Among those who clean their needles and syringes, most of them used cold water
- Needles and syringes exchange program & NGO drop-in centers were second to pharmacy in terms of places where IDU can get clean needles and syringes
- Heroin was commonly used by IDU, while Yama and Crystal ice were common among non IDU
- About 50% and 60% of IDU and non IDU reported having sex right after using drug, respectively. Among those who had reported having sex, the majority acknowledged that the effect of drugs led to **increase their sexual desire**



Conclusions – DU survey

- Consistent condom use in the past year with regular and non-paid partners remained less than 65%. However, consistent condom use with paid-sexual partners rose to 70%
- Reported STI symptoms were higher among IDU than non IDU
- About 20% to 30% of DU did not seek care for their last reported STI symptom. For those who sought treatment, pharmacies and NGO clinics were frequently reported
- Majority of study participants knew the main mode of HIV transmission. However, less than 50% knew about the availability of ARVs
- Only half of DU had an HIV test in the past and among those who tested, most of them knew the result
- NGO staff, rehab staff and the media were the main sources of HIV/AIDS information reported
- HIV prevalence was high among IDU



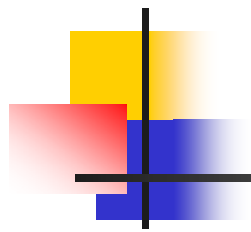
Recommendations

- More intervention programs focusing on reducing the practices of sharing needles and syringes and increasing the level of consistent condom use - are urgently needed for drug users
- Education should be developed to raise DU awareness on HIV and STI and transmission
- HIV testing should be encouraged, especially among IDU, with provision of services adapted to DUs
- STI care services should be provided in a way that is suitable for DU, especially those who stay in the community
- Intervention programs should be developed and implemented according to the distribution of drug users in the country



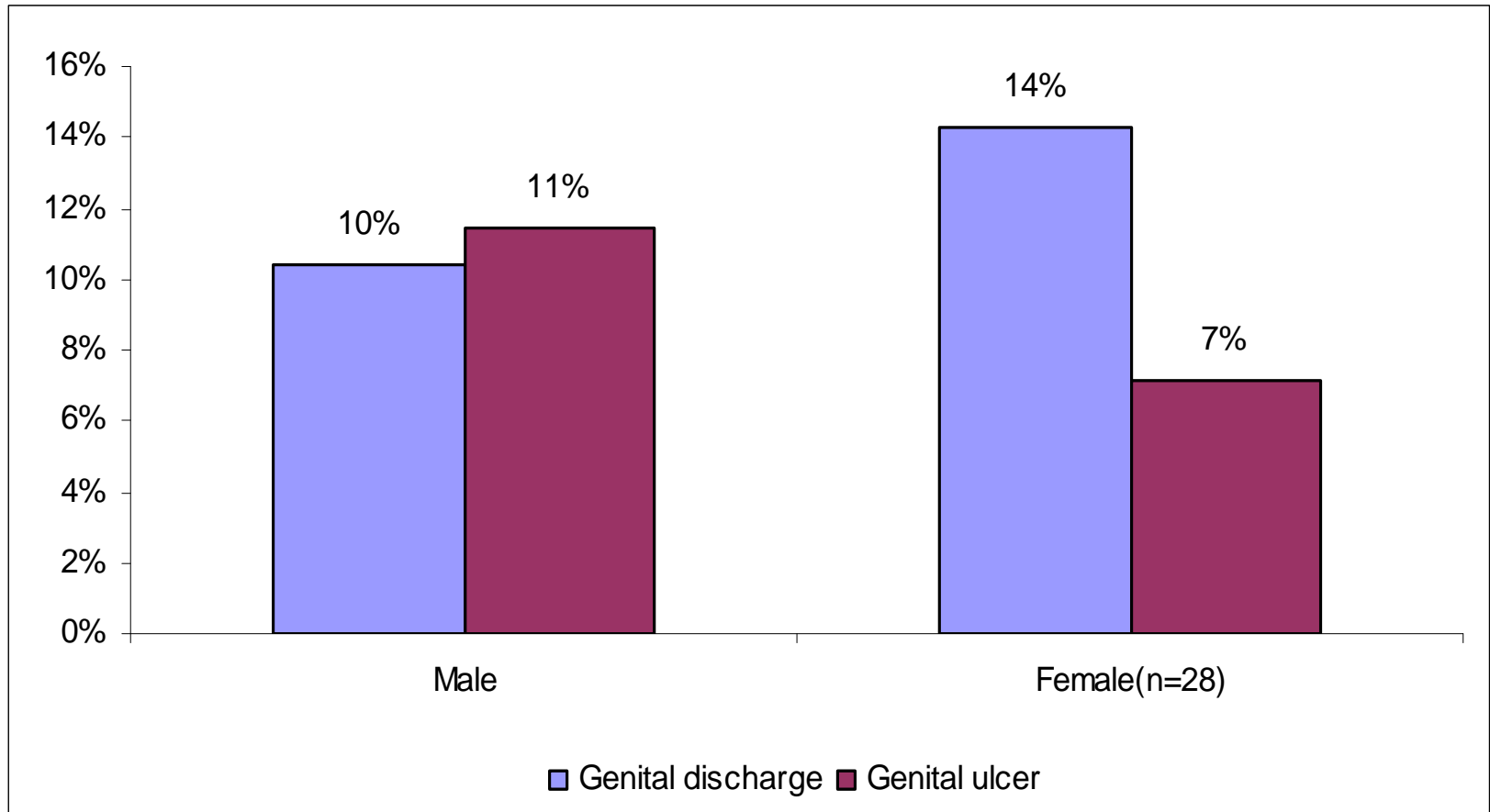
Acknowledgements

- National Center for HIV/AIDS, Dermatology and STDs (NCHADS)
- National Authority for Combating Drugs
- Rehabilitation centers in Phnom Penh, Siem Reap, Battambang & Banteay Meanchey.
- Korsang
- Mith Samlanh
- Provincial Health Departments and Provincial AIDS Programs of Battambang, Siem Reap, Banteay Meanchey and Phnom Penh
- National Institute of Public Health (NIPH)
- World Health Organization
- UNAIDS
- Burnet Institute
- US CDC
- Institut Pasteur-Cambodia



Thank you

Results – Reported STI symptoms by gender, in the past year





Results – Knowledge on HIV prevention and care, by gender

	Male	Female (n =28)
Properly use condom can prevent transmission	83.8%	89.3%
Using used needles syringes can get infected	75.5%	89.3%
Knowing places to voluntarily get HIV test	52.8%	71.4%
Ever tested for HIV	44.0%	71.4%
Knowing their test results	94.0%	95.0%
Knowing there is health facilities providing ART	40.3%	67.9%
Believed they can get ART if needed	50.0%	57.1%
