

Urgent need to address multiple high-risk behavior and prevent HIV among young PWID

San Hone¹; Min Yu Aung¹; Roberta Sutton²; Sabe Phyu³; Khin Marlar Tun²; Marjolein Jacobs³; Maria Lahuerta^{2,4}

¹National AIDS Programme, Myanmar, ²ICAP at Columbia University, ³The United Nations Joint Programme on HIV and AIDS (UNAIDS),

⁴Department of Epidemiology, Mailman School of Public Health

Background

- In Myanmar, with an HIV prevalence of 0.6% (220,000 people living with HIV) among 15 years and older in 2016, over 70% of new HIV infections were estimated to occur among key populations.
- Injection drug use has persistently contributed to HIV transmission, with an estimated 29% of new infections occurring among people who inject drugs (PWID).
- Young PWID, defined as PWID under the age of 25, may have different risk factors and health care seeking behaviors that will require targeted interventions.

Methods

- From October 2017-January 2018, a cross-sectional integrated bio-behavioral survey (IBBS) was conducted among PWID using respondent driven sampling (RDS) in eleven townships and two cities in Myanmar.

Eligibility criteria included age ≥15 years, having injected drugs in the past month, and having lived in the township/city for ≥6 months.

- Participants completed an interview and were counseled and tested for HIV, hepatitis B, hepatitis C and syphilis.
- Weighted data analysis was conducted with RDS Analyst and SAS.
- We compared socio-demographic characteristics, risk behaviors, HIV testing and prevalence, and health seeking behaviors of young PWID (15-25 years) vs. older PWID (>25 years) using Chi-square test.

Table 1. Socio-demographic characteristics of PWID by age groups

	≤25 years N (%)	>25 years N (%)	Chi-square test P-value
Age			
	1490 (24.4)	4571 (75.6)	
Sex			
Male	1472 (99.1)	4499 (98.5)	<0.001
Female	18 (0.9)	69 (1.5)	
Education level (completed)			
None	52 (4.0)	297 (8.5)	<0.001
Primary	190 (12.6)	1005 (24.0)	
Secondary	581 (40.1)	1506 (33.3)	
High School	528 (34.1)	1273 (25.5)	
University	128 (8.7)	286 (5.3)	
Graduate	11 (0.6)	203 (3.4)	
Marital Status			
Currently married	197 (11.5)	1964 (42.0)	<0.001
Ever married	68 (4.8)	735 (16.1)	
Never married	1225 (83.7)	1872 (41.9)	
Household composition			
Spouse/ partner	176 (10.5)	1721 (36.0)	<0.001
Other sexual partner	3 (0.5)	19 (0.4)	
Parents/ relatives	1216 (78.9)	2427 (48.4)	
Friends	123 (11.0)	460 (13.9)	
Alone	61 (4.9)	432 (10.8)	

Results

- Of the 6,061 PWID enrolled, 1,490 (25%) were ≤25 years old (Table 1).
- Younger PWID attained a higher level of education than older PWID
- Most have never been married and live with parents or relatives.
- The mean age at first drug injection was 19 years old, compared to 29 years old for PWID > 25 years (Table 2).
- Younger PWID were slightly more likely to have casual (4.9% vs. 2.5%) or paid (7.7% vs. 7%) sexual partners.
- Young PWID were somewhat more likely to have used a condom at last sexual encounter (46.0% vs. 34.2%).
- The HIV prevalence for young PWID was 28.3%, lower than older PWID (37.0%) (Figure 1).
- Syphilis and hepatitis B prevalence were also slightly lower among young PWID compared to older PWID.

Chart 1. HIV testing rates and HIV, syphilis, hepatitis B and C infection prevalence

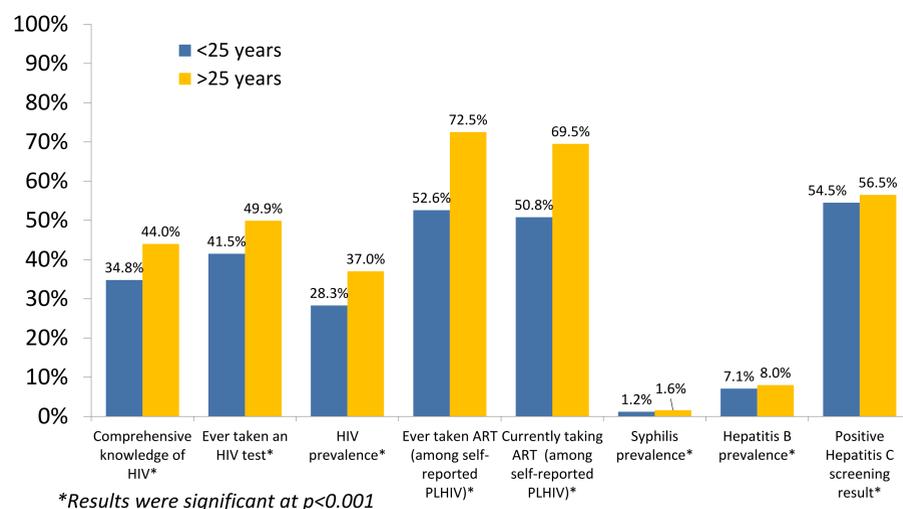


Table 2. Drug use and sexual behaviors of PWID by age

	≤25 years N (%)	>25 years N (%)	Chi-square test P-value
First Drug Use (Mean age)			
Non-injection Drug Use	17.7	23.8	
Injection Drug Use	19	28.8	
Injection Frequency (last month)			
Once a week or less	74 (4.7)	167 (3.9)	<0.001
> Once a week	49 (3.0)	194 (3.5)	
Once a day	169 (11.3)	447 (8.6)	
2-3 times/ day	1005 (70.2)	3171 (71.7)	
4+ times/day	192 (10.8)	583 (12.0)	
Needle Sharing			
Ever	523 (31.5)	1660 (31.9)	0.5
Last month	248 (48.9)	570 (33.2)	<0.001
At last injection	128 (8.1)	274 (5.2)	<0.001
Overdose			
Last 12 months	136 (9.1)	346 (6.9)	<0.001
Drug Treatment (methadone)			
Ever received	451 (30.2)	1834 (36.7)	<0.001
Last 12 months	193 (12.3)	1009 (19.1)	<0.001
Condom Use			
At last sexual encounter	464 (46.0)	1400 (34.3)	<0.001
At last commercial sex encounter	112 (89.8)	272 (77.2)	<0.001
At last anal sex encounter	26 (63.0)	11 (83.9)	0.001

Key results for young PWID (≤25 years old)

- Higher proportion shared needles in the past month (48.9% vs. 33.2%)
- Fewer had comprehensive HIV knowledge (34.8% vs. 44.0%)
- Fewer had tested for HIV (41.5% vs. 49.9%)
- Time from first non-injection to injection drug use was also shorter for young PWID (less than 2 vs. 5 years)
- Fewer young PWID with a known HIV status self-reported having ever taken ART (52.6% vs. 72.5%) and currently taking ART (50.8% vs. 69.5%).

Conclusion

- Young PWID engaged in multiple high-risk behaviors early, and age of first drug use reflects a current trend of drug use among youth in Myanmar.
- Findings highlight the need to expand the scope of drug and HIV prevention services to young people.
- Primary prevention activities targeting children and youth through parents and schools is vital and could be a practically workable strategy for preventing early drug initiation and HIV transmission.
- Lower HIV knowledge and testing practices among young PWID reflect inadequate coverage of HIV prevention education and harm reduction for a young population who are at high risk of HIV infection, resulting in high HIV prevalence.
- Findings demonstrate the need for integrated youth friendly services, tailored to the needs of young PWID, stressing harm reduction practices and HIV prevention services to be developed and implemented.