

FACTORS ASSOCIATED WITH LOSS TO RETENTION AMONG FEE-BASED AND FREE PrEP CLIENTS IN THAILAND

1010

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Background

- Pre-exposure prophylaxis (PrEP) is highly effective at preventing HIV acquisition.
- The two largest PrEP programs in Thailand are PrEP-15 and Princess PrEP
- PrEP-15 is a fee-based service, providing PrEP and related laboratory services for 15 Thai Baht per day (approximately 15 US dollars per month). This service is implemented at the Thai Red Cross Anonymous Clinic (TRCAC) in Bangkok, Thailand
- Princess PrEP is a key population (KP)-led service, through which trained community lay providers deliver PrEP counseling and dispense PrEP to KPs in 9 community based clinics in 6 provinces in Thailand (Bangkok, Chonburi, Chiang Mai, Chiang Rai, Songkhla, and Ubon Ratchathani)
- Here we aim to compare retention between these programs and identify factors associated with loss to follow-up.

Methods

- Clients initiating PrEP between January 2016-July 2019 were included in this analysis. Demographic data and risk behavior were self-reported.
- Retention was defined as returning for a scheduled visit within 1.5 months and was measured at months 1, 3, 6, 9, and 12 after PrEP initiation.
- Multivariable linear regression was used to identify factors associated with loss to follow-up at one month and one year after initiation.

Results

- A total of 5,687 clients were provided with PrEP between January 2016-July 2019, 66.6% through Princess PrEP (Figure 1).
- Compared with clients in free Princess PrEP, clients from fee based PrEP-15 were less often men who have sex with men (76.3% and 82.7%, p<0.001), less often transgender women (TGW) (3.1% and 12.8%, p<0.001), were less likely to have education lower bachelor's degree (6.3% vs. 27.7%, p<0.001), more often reported inconsistent condom use (86.4% vs 65.3%, p<0.001), less often reported multiple partners (54.8% vs 61.2%, p<0.001), less often reported sex work (6.6% vs 18.2%, p<0.001), and more often used alcohol while having sex in the past 3 months (25.6% vs 11.5%, p<0.001). Use of amphetamine type stimulants (ATS) while having sex in the past 3 months was similar between the two programs (7.1% vs 6.7%, p =0.609)
- Retention rates in PrEP-15 and Princess were 45.1% and 65.4% at month 1 (p<0.001), 37.3% and 56% at month 3 (p<0.001), 31.5% and 48.2% at

Conclusion

- Clients accessing PrEP through the free, KP-led Princess PrEP program had higher retention compared to clients in the fee-based PrEP-15 program.
- Scale-up of free PrEP is needed to facilitate retention in PrEP services.
- The Thai Ministry of Public Health has introduced PrEP under the universal health coverage in 2020, which will enable clients to access free PrEP throughout the country through hospital based services.

Retention rates in free PrEP program were higher than for fee-based PrEP. PrEP should be available under universal health coverage to retain clients in care and scale up of key population-led PrEP services is needed.

- month 6 (p<0.001), 28.3% and 44.5% at month 9 (p<0.001), 25.2% and 39.9% at month 12(p<0.001), respectively (Figure 2).
- In the multivariable analysis, factors associated with loss to follow up after month 1 were having an education lower than bachelor's degree (adjusted odds ratio - aOR: 1.56; 95% confidence interval - CI 1.32-1.84, p<0.001), clients aged less than 20 years (aOR: 1.76; 95%CI 1.2-2.59, p<0.05), clients aged 20-29 years (aOR; 1.3 95% CI 1-1.68, p<0.05) inconsistent condom use in the past 3 months (aOR: 1.31; 95%CI 1.1-1.55, p<0.05), drinking any alcohol in the past 3 months (aOR: 1.51; 95%CI 1.24-1.85, p<0.001), reporting sex work (aOR: 1.66; 95% CI 1.37-2.02, p<0.001), and clients who paid for PrEP (aOR: 2.48; 95%CI 2.06-3.0, p<0.001), Table 1.
- Factors associated with loss to follow at month 12 were clients aged less than 20 years (aOR: 2.02; 95%CI 1.1-3.67, p<0.05), and clients who paid for PrEP (aOR: 1.47; 95%CI 1.18-1.84, p<0.05) Table 2.

- However, there is also a need to scale up KP-led PrEP services since these services are KP-friendly and delivered through a client-centered approach.
- Retention support for PrEP users remains a priority, and should particularly be tailored to meet the needs of adolescents and those with education less than bachelor's degree.

Figure 1
Number of clients accessing Fee-based vs Free PrEP from January 2016 –July 2019

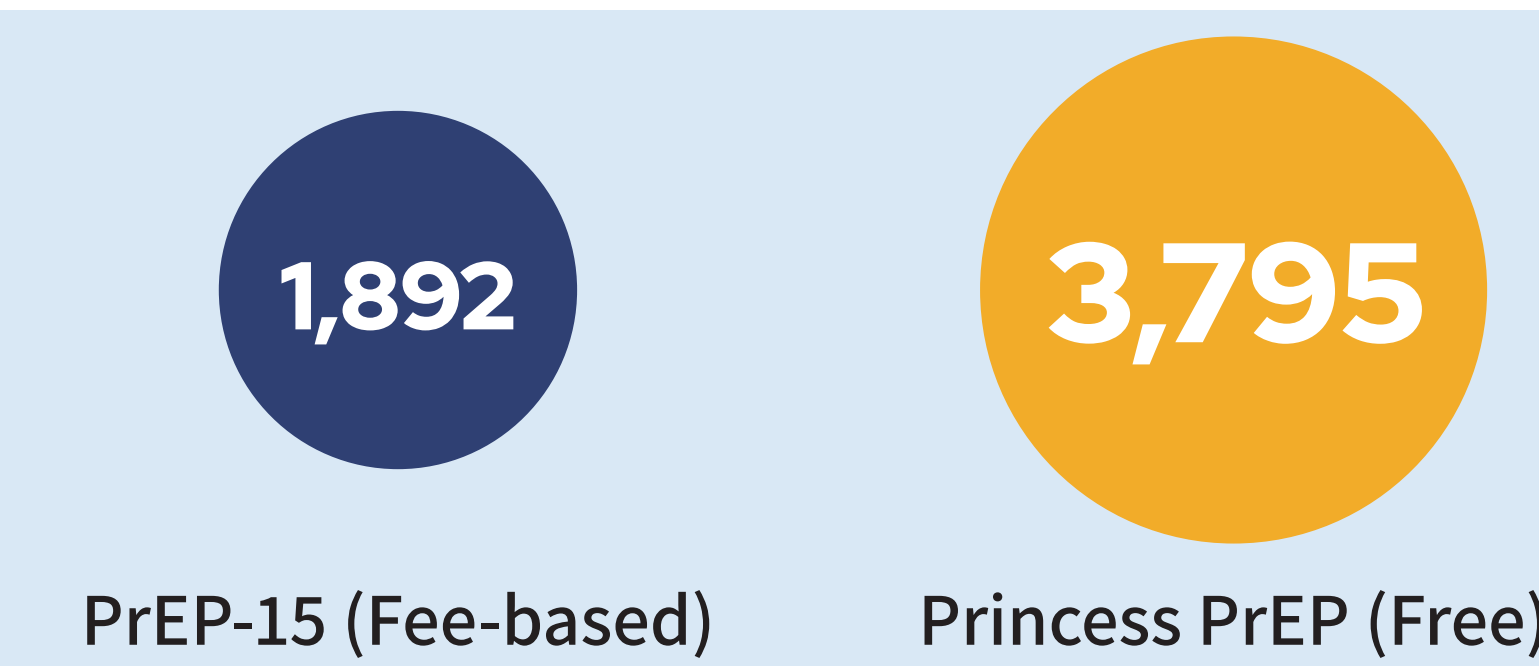


Figure 2
Retention in PrEP-15 vs Princess PrEP

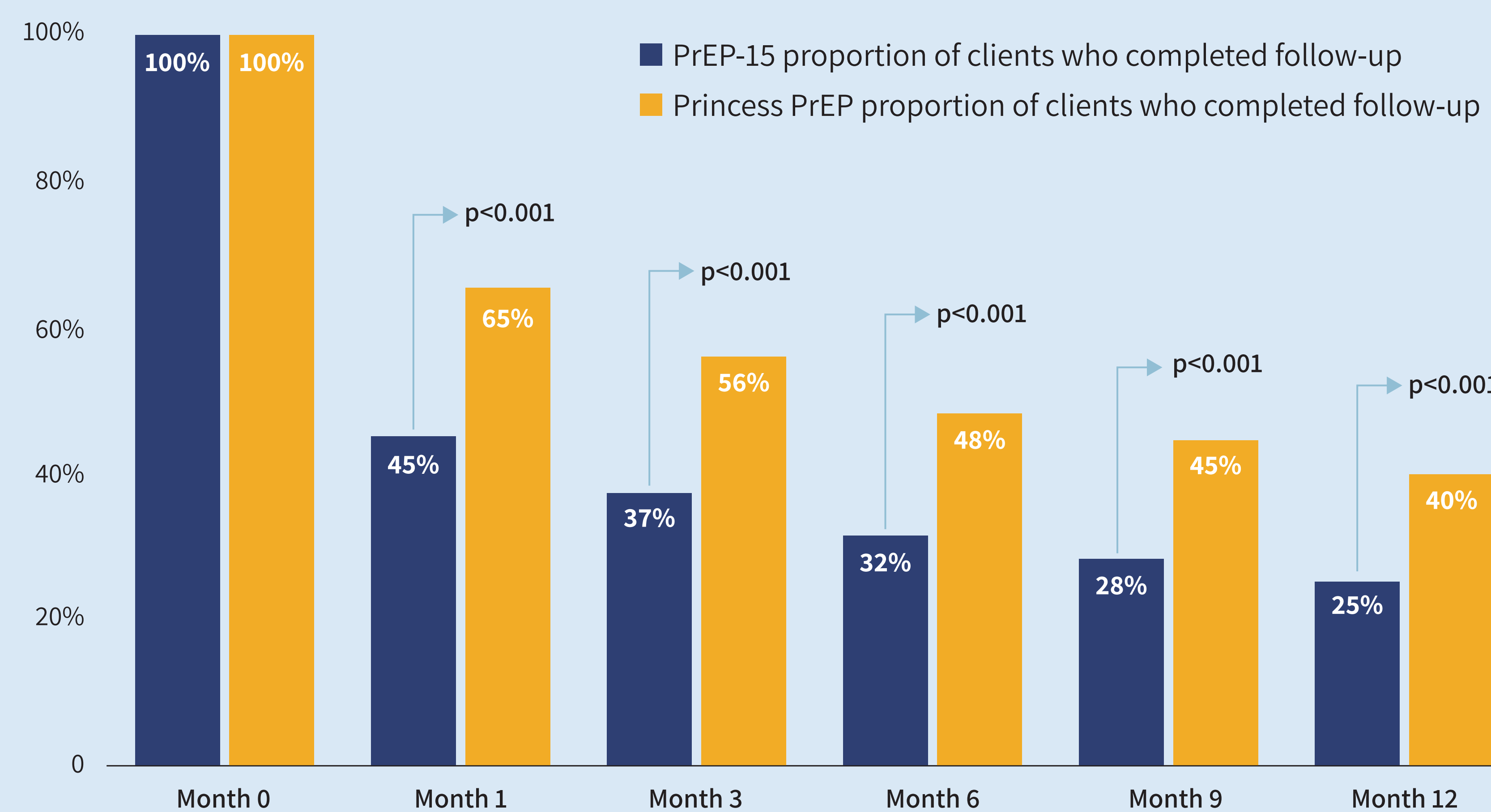


Table 1 Logistic regression for factors associated with loss to follow-up at Month 1

Factor	Unadjusted Odds Ratio (95%CI)	p-value	Adjusted Odds Ratio (95%CI)	p-value
Age group				
• Less than 20 years	1.79 (1.34-2.39)	<0.001	1.76 (1.2-2.59)	<0.05
• 20-29 years	1.44 (1.2-1.73)	<0.001	1.3 (1-1.68)	<0.05
• 30-39 years	1.09 (0.9-1.32)	0.358	1.04 (0.8-1.36)	0.757
• 40 years or higher	1			
Education				
• Lower than bachelor's degree	1.59 (1.39-1.83)	<0.001	1.56 (1.32-1.84)	<0.001
• Bachelor's degree or higher	1		1	
Condom use				
• Inconsistent	1.85 (1.61-2.14)	<0.001	1.31 (1.1-1.55)	<0.05
• Consistent	1		1	
Alcohol drinking last 3 months				
• No	1		1	
• Yes	1.69 (1.47-1.95)	<0.001	1.51 (1.24-1.85)	<0.001
Sex worker				
• No	1		1	
• Yes	1.52 (1.31-1.77)	<0.001	1.66 (1.37-2.02)	<0.001
Fee vs Free PrEP (PrEP-15 vs Princess PrEP)				
• Fee-based (PrEP-15)	2.11 (1.89-2.36)	<0.001	2.48 (2.06-3)	<0.001
• Free (Princess PrEP)	1		1	

*Factors included in the logistic regression were age, client breakdown by target population, monthly income, educational background, multiple partners, condom use, injecting drugs, amphetamine-type stimulants use, drinking alcohol, sex work and accessing fee based or free PrEP

Table 2 Logistic regression for factors associated with loss to follow-up at Month 12

Factor	Unadjusted Odds Ratio (95%CI)	p-value	Adjusted Odds Ratio (95%CI)	p-value
Age group				
• Less than 20 years	1.77 (0.98-3.2)	0.058	2.02 (1.11-3.67)	<0.05
• 20-29 years	1.1 (0.81-1.5)	0.532	1.18 (0.87-1.62)	0.286
• 30-39 years	0.93 (0.68-1.28)	0.650	0.97 (0.71-1.34)	0.872
• 40 years or higher	1			
Fee vs Free PrEP (PrEP-15 vs Princess PrEP)				
• Fee (PrEP-15)	1.41 (1.13-1.75)	<0.05	1.47 (1.18-1.84)	<0.05
• Free (Princess PrEP)	1		1	

*Factors included in the logistic regression were age, client breakdown by target population, monthly income, educational background, multiple partners, condom use, injecting drugs, amphetamine-type stimulants use, drinking alcohol, sex work and accessing fee based or free PrEP