

WEPEB311

# Transgender-Led Same-Day Antiretroviral Therapy Services at the Tangerine Community Health Center in Bangkok, Thailand

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Acceptance of SDART among HIV-positive TGW in Bangkok is very high. However, retention needs intensive reinforcement targeting TGW who may need additional clinical and psychosocial supports.



## Background

Transgender women (TGW) are disproportionately affected by HIV, but data are limited about how an HIV diagnosis influences the care received by TGW. The Tangerine Community Health Center at the Thai Red Cross Anonymous Clinic offers key population-led same-day antiretroviral therapy (SDART) services to prepare HIV-positive clients for optimal immediate and long-term care engagement. This study describes and evaluates the implications of SDART services for trans women clients.

## Methods

Data were obtained from self-identified TGW who tested HIV-positive at the Tangerine Community Health Center in Bangkok. Acceptability and logistical eligibility (ART naïve, ability to return for follow-up visits) were self-reported. Baseline laboratory tests (creatinine/ALT/syphilis/HBsAg/anti-HCV/CD4/CrAg if CD4<100) were conducted based on national guidelines. Physicians conducted a physical examination and used chest X-ray results to determine ART eligibility without other test results. A team of transgender-competent physicians, nurses, and TGW staff provided in-clinic HIV services, integrated with hormone services, and adherence/retention support between clinic visits. Median days from HIV diagnosis to ART initiation were calculated and baseline demographic and clinical characteristics described. Retention at 3, 6, and 12 months after ART initiation and viral load suppression were measured. Logistic regression was conducted to determine factors associated with loss to follow-up.

## Results

From July 2017–April 2019, 87.1% of 186 TGW clients who tested HIV positive and met the logistical criteria agreed to partake of SDART services. ART was initiated in 96.9%: 83.6% on the same day, 7.1% on days two and three, 7.9% on days 4 through 7, and 1.4% in more than 7 days. Median (IQR) CD4 count was 306 (232–442) cells/mm<sup>3</sup>. Of TGW who started ART, 26.9%, 7.6%, and 3.4% tested reactive for syphilis, hepatitis B, and hepatitis C, respectively. Retention rates at 3, 6, and 12 months were 92.4%, 89.9%, and 92.9%, respectively. Viral suppression was achieved by 91.8% of TGW after at least 6 months of ART. No factors were associated with loss to follow-up after ART initiation.

Table 2: Factors Associated With TGW Who Were Lost to Follow-up After ART Initiation (N=99)

Factors	Univariate Model				Multivariable Model		
	N	OR	95% CI	P-value	aOR	95% CI	P-value
Client Type	134						
New	74	0.77	0.32–1.87	0.57			
Re-engaged	60	Ref.					
Age groups	134						
<25 years old	46	0.75	0.24–2.33	0.62			
25–35 years old	56	0.68	0.23–2.06	0.50			
>35 years old	32	Ref.					
Education	109						
Less than bachelor's degree	80	Ref.					
Bachelor's degree and higher	29	1.18	0.38–3.7	0.78			
Monthly income	68						
≤10,000 bath	14	1.83	0.41–8.23	0.43			
>10,000 bath	54	Ref.					
CD4 groups*	134						
≤250 cell/mm <sup>3</sup>	38	2.5	0.9–6.95	0.08	2.47	0.87–6.96	0.09
251–350 cell/mm <sup>3</sup>	39	0.9	0.27–2.99	0.86	0.97	0.29–3.27	0.97
>350 cell/mm <sup>3</sup>	57	Ref.			Ref.		
Creatinine	134						
Normal <sup>[1]</sup>	112	Ref.					
Abnormal	22	1.02	0.31–3.35	0.97			
ALT	134						
Normal <sup>[2]</sup>	121	Ref.					
Abnormal	13	0.82	0.17–3.96	0.80			
Syphilis	134						
Non-reactive	102	Ref.					
Reactive	32	1.4	0.52–3.76	0.50			
HBsAg	134						
Negative	122	Ref.					
Positive	12	0.39	0.05–3.19	0.38			
Anti-HCV*	134						
Negative	130	Ref.			Ref.		
Positive	4	4.91	0.66–36.74	0.12	4.21	0.53–33.73	0.18

\* Indicates variables that were selected for the multivariable model (p-value <0.25)

[1] Creatinine normal range: 0.72–1.18 mg/dL for male, 0.55–1.02 mg/dL for female [2] ALT normal range: <50 units per liter for male, <35 units per liter for female [3] aOR = Adjusted Odds Ratio

Table 1: Characteristics of Transgender Women Clients at Thai Red Cross Anonymous Clinic, Bangkok, Thailand

Characteristics	Overall (N=151)	Active Cases (n=110)	Lost to Follow-up (n=24)	Unknown (n=17)	P-value <sup>[1]</sup> (Active vs. lost to Follow-up)
Client Type					0.57a
New	81 (53.6)	62 (56.4)	12 (50)	7 (41.2)	
Re-engaged	70 (46.4)	48 (43.6)	12 (50)	10 (58.8)	
Age (years)					
Minimum, maximum	17.6, 48.2	17.6, 45	19.8, 48.2	19.8, 40.5	
Mean (SD)	27.5 (5.7)	27.4 (5.5)	28.4 (6.8)	27.4 (6.1)	0.44c
Median (IQR)	26.4 (23.3–30)	26.4 (23.3–29.4)	28.5 (23.5–31.4)	25 (23.8–30.1)	0.52d
Age groups					0.79a
<25 years old	55 (36.4)	38 (34.5)	8 (33.3)	9 (52.9)	
25–30 years old	59 (39.1)	47 (42.7)	9 (37.5)	3 (17.6)	
>30 years old	37 (24.5)	25 (22.7)	7 (29.2)	5 (29.4)	
Education					0.77b
Number of responses	125	92	17	16	
Less than bachelor's degree	91 (72.8)	68 (73.9)	12 (70.6)	11 (68.8)	
Bachelor's degree or higher	34 (27.2)	24 (26.1)	5 (29.4)	5 (31.3)	
Monthly income					0.42b
Number of responses	83	58	10	15	
≤10,000 Thai Baht	16 (19.3)	11 (19)	3 (30)	2 (13.3)	
>10,000 Thai Baht	67 (80.7)	47 (81)	7 (70)	13 (86.7)	
CD4 (cell/mm <sup>3</sup> )					
Minimum, maximum	13, 1377	13, 1200	105, 1377	32, 515	
Mean (SD)	360.5 (222.8)	378 (217.7)	356.5 (277.3)	252.9 (133.5)	0.68c
Median (IQR)	306 (232–442)	329 (259–472)	266 (166.5–501.5)	248 (195–306)	0.20d
CD4 groups					0.11a
≤250 cell/mm <sup>3</sup>	47 (31.1)	27 (24.5)	11 (45.8)	9 (52.9)	
251–350 cell/mm <sup>3</sup>	43 (28.5)	34 (30.9)	5 (20.8)	4 (23.5)	
>350 cell/mm <sup>3</sup>	61 (40.4)	49 (44.5)	8 (33.3)	4 (23.5)	
Creatinine					>0.99b
Normal <sup>[1]</sup>	127 (84.1)	92 (83.6)	20 (83.3)	15 (88.2)	
Abnormal	24 (15.9)	18 (16.4)	4 (16.7)	2 (11.8)	
ALT					>0.99b
Normal <sup>[1]</sup>	137 (90.7)	99 (90)	22 (91.7)	16 (94.1)	
Abnormal	14 (9.3)	11 (10)	2 (8.3)	1 (5.9)	
Syphilis					0.50a
Non-reactive	113 (74.8)	85 (77.3)	17 (70.8)	11 (64.7)	
Reactive	38 (25.2)	25 (22.7)	7 (29.2)	6 (35.3)	
HBsAg					0.69b
Normal	137 (90.7)	99 (90)	23 (95.8)	15 (88.2)	
Abnormal	14 (9.3)	11 (10)	1 (4.2)	2 (11.8)	
Anti-HCV					0.15b
Normal	147 (97.4)	108 (98.2)	22 (91.7)	17 (100)	
Abnormal	4 (2.6)	2 (1.8)	2 (8.3)	0 (0)	
Chest X-ray					0.59b
Number tested	150	109	24	17	
Normal	144 (96)	104 (95.4)	24 (100)	16 (94.1)	
Abnormal	6 (4)	5 (4.6)	0 (0)	1 (5.9)	
Duration from care engagement to ART initiation					0.32b
Same day	115 (76.2)	81 (73.6)	22 (91.7)	12 (70.6)	
Day 2–3	19 (12.6)	15 (13.6)	2 (8.3)	2 (11.8)	
Day 4–7	13 (8.6)	10 (9.1)	0 (0)	3 (17.6)	
>Day 7	4 (2.6)	4 (3.6)	0 (0)	0 (0)	

[1] a -> P-values are from Chi-square test to compare proportions between two groups.

b -> P-values are from Fisher's Exact test to compare proportions between two groups.

c -> P-values are from two-sample t-test to test for differences between two means.

d -> P-values are from Wilcoxon-Mann Whitney test used to compare differences in medians between two groups.

[2] Creatinine normal range: 0.72–1.18 mg/dL for male, 0.55–1.02 mg/dL for female

[3] ALT normal range: <50 units per liter for male, <35 units per liter for female

## Conclusions

Acceptance of SDART among HIV-positive TGW in Bangkok is very high. Retention, however, needs intensive reinforcement targeting TGW who may need additional clinical and psychosocial supports.