Same-Day ART
as part of Differentiated Service Delivery models

Nittaya Phanuphak, MD, PhD
PREVENTION
Thai Red Cross AIDS Research Centre

IAS 2019 Post-Conference Workshop: Overcoming Challenges in HIV with Science, Innovation and Collaborations in Southeast Asia
4 October 2019, Kuala Lumpur, Malaysia
Why should we accelerate ART initiation?

• From randomized trials
  - Increased likelihood to **start ART within 90 days** (4 trials): pooled RR 1.35 (1.13 – 1.62)
  - Increased **viral suppression** at 12 months (3 trials): 1.17 (1.07 – 1.27)
  - Increase **retention** at 12 months (3 trials): 1.11 (0.99 – 1.26)
  - **Reduced mortality**: 0.53 (0.28 – 1.00)

• No benefit of multiple lengthy counselling sessions before ART initiation, could result in LTF and deaths

• ART initiation should not be delayed for the majority in order to prevent starting too quickly for the minority → **Differentiated Service Delivery**

Phanuphak N, Seekaew P, Phanuphak P. Lancet HIV, Published online September 9, 2019
http://dx.doi.org/10.1016/S2352-3018(19)30236-X
Rapid ART vs. Same-Day ART

• Allowing ART initiation to happen within 7 days of confirmed HIV diagnosis and clinical assessment (Rapid ART) means some visits and some level of complacency are allowed between HIV diagnosis and ART initiation

• Rapid ART initiation might not result in a full change of service provision as compared with the amount of change needed to achieve same-day ART

• We should prioritise the offer of same-day ART for all who are ready, and allow for ART initiation within 7 days if clinically or logistically indicated

Phanuphak N, Seekeaew P, Phanuphak P. Lancet HIV, Published online September 9, 2019
http://dx.doi.org/10.1016/S2352-3018(19)30236-X
Common features for Same-Day ART in Thailand

Chest X-Ray

History Assessment

Physical Examination

Key considerations for Same-Day ART implementation

**When?** Operating Hours for ARV Clinic

**Who?** ARV Prescribers

**What?** Baseline Laboratory Testing

+ Sources of health insurance to cover ART and labs

ART initiation guidelines in Thailand

• ART drug regimen:
   FTC/TDF + EFV

• Baseline tests:
   Creatinine
   Urinalysis
   CD4 count
   HBsAg
   Anti-HCV
   Syphilis serology
   ALT
   Chest X-Ray
   Cryptococcal Ag (CD<100 cells/mm³)
Same-Day ART as HIV diagnosis in HIV testing clinic: Thai Red Cross Anonymous Clinic

Counselors + Navigators + Nurses + Doctors

Same-Day ART assessment and initiation at Thai Red Cross Anonymous Clinic

- After 1\textsuperscript{st} anti-HIV reactive:
  - Initiate ART counseling (willing to start ART, ART-naïve, able to come back for F/U)
  - TB symptom screening
  - Blood draw for anti-HIV confirmation, CD4, and safety labs (blood amount enough to order Crypto Ag if CD4 <100)
  - CXR
  - (GeneXpert MTB/RIF ordered only if positive TB symptoms and/or abnormal CXR)

- See doctors after HIV-positive status confirmed and CXR report available
  - History and physical exam to rule out TB, cryptococcal meningitis, and other serious OIs requiring hospitalization

Same-Day ART as HIV diagnosis in HIV testing clinic: Thai Red Cross Anonymous Clinic

Those in Same-Day ART program were 3.9 times more likely to start ART

Those in Same-Day ART program were 2.2 times more likely to be viral suppressed

Same-Day ART as HIV diagnosis in HIV testing clinic: Thai Red Cross Anonymous Clinic

Same-Day ART database, Thai Red Cross Anonymous Clinic (July 2017-April 2019)
Same-Day ART as HIV diagnosis in HIV testing clinic: Thai Red Cross Anonymous Clinic

- **Month 6**: 90.2% retained in care (n=1,630)
- **Month 12**: 95.1% retained in care (n=1,005)
- **Month 12**: 89.7% VL <50 copies/mL (n=585)

Same-Day ART database, Thai Red Cross Anonymous Clinic (July 2017-April 2019)
Same-Day ART as HIV diagnosis/first hospital visit: with 9 hospitals in 5 high HIV burden provinces

**Chiang Mai**
- Hang Dong Hospital
- Chiangmai Hospital
- Sarapee Hospital

94% 67% 71%

**Chiang Rai**
- Chiangrai Prachanukroh Hospital

91% 78% 77%

**Bangkok**
- Thai Red Cross Anonymous Clinic

80% 57% 79%

**Songkhla**
- Hat Yai Hospital

100% 81% 89%

**Chonburi**
- Queen Savang Vadhana Memorial Hospital

145% 70% 83%

Same-Day ART as HIV diagnosis/first hospital visit: with 9 hospitals in 5 high HIV burden provinces

• Some hospitals need **CD4 count**
• Some hospitals need **baseline safety labs** (all or at least for Cr)
• Some hospitals need **CMVR screening** or **Crypto Ag** regardless of CD4 count!!!
Same-Day ART as HIV diagnosis/first hospital visit: with 9 hospitals in 5 high HIV burden provinces

- Not using baseline laboratory results facilitates faster ART initiation (aOR: 5.48; 95%CI: 3.98-7.65; p<0.001)
- No increase in severe adverse events or deaths

Conclusions

• Same-Day ART initiation is feasible both in HIV testing clinics and hospital settings

• Viral load suppression and retention are high

• Needing CD4 counts prior to ART initiation results in longer time to start HIV treatment

• Even with infectious disease physicians leading ART services, practices still varied, and some practices were based on anecdotal case reports/experience

• Standardized clinical guidelines particularly for Same-Day ART is needed
Acknowledgments
THANK YOU