ANTIRETROVIRAL THERAPY INITIATION, ADHERENCE AND RETENTION IN CARE





In partnership with:





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I A S X

ANTIRETROVIRAL THERAPY INITIATION, ADHERENCE AND RETENTION IN CARE

Intended Audience	AIMS	Best practices
Providers of HIV care in resource limited settings: Clinicians, clinical officers, nurses, midwives, pharmacists, facility managers, public health professionals, community health workers	Enhance capacity to provide quality, accessible HIV treatment services Based on the global normative guidelines from the World Health Organization, towards the goal of achieving viral suppression for all patients	To maximize treatment adherence Ensure that people remain engaged in care

LEARNING OBJECTIVES

The purpose of this module is to summarize

- Current WHO recommendations and best practices
 - Initiation of ART
 - Increasing rates of treatment adherence and retention in care

After completing this module, you will be able to...

- Explain the treatment and prevention benefits of ART
- Describe existing WHO recommendations and latest evidence on the initiation of ART
- Describe how emerging practices can increase rates of treatment initiation, treatment adherence, retention in care and viral suppression.

GOALS OF THE FAST-TRACK CITIES INITIATIVE

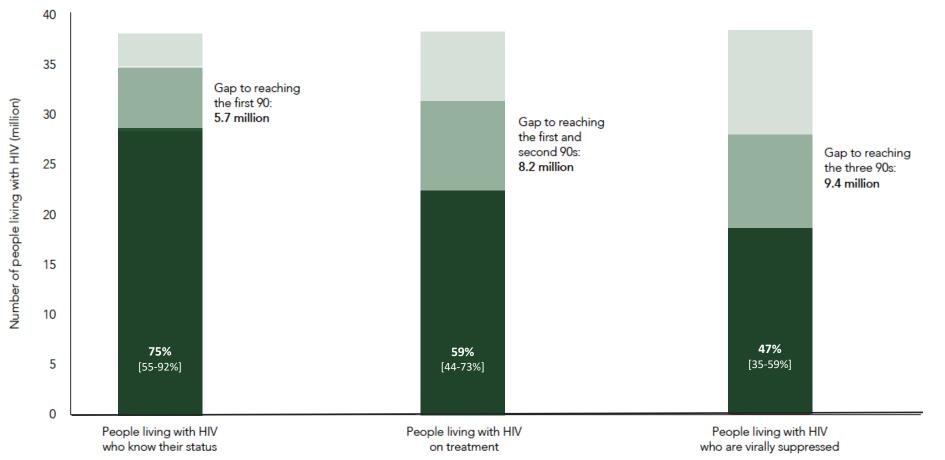


- Optimize the HIV care and prevention continua towards attainment of the global 90-90-90 targets
- Increase utilization of combination HIV prevention services
- Operationalize global and local treatment policies at the city clinic level
- Reduce to zero the negative impact of stigma and discrimination

SECTION 1 INTRODUCTION

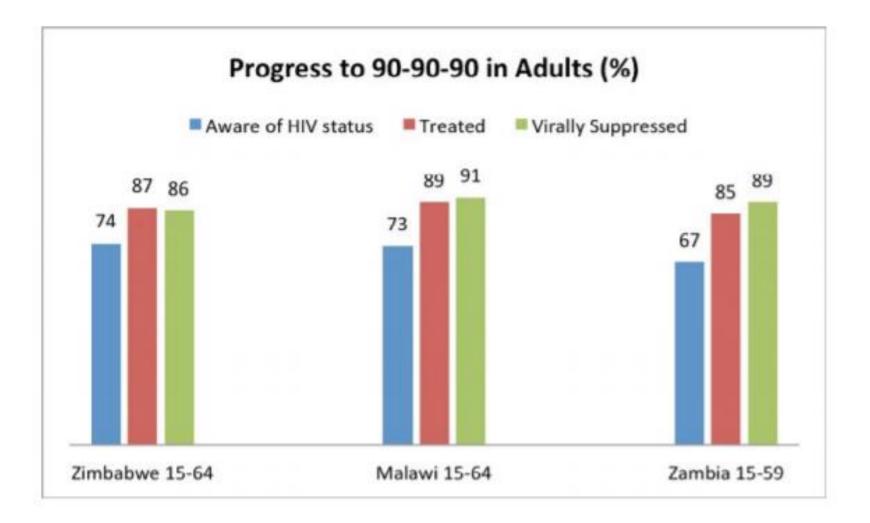
MUCH PROGRESS MADE, BUT MORE NEEDS TO BE ACHEIVED

HIV testing and treatment cascade, global, 2017



Sources: Miles to go: UNAIDS UNAIDS AIDSInfo database, 2018

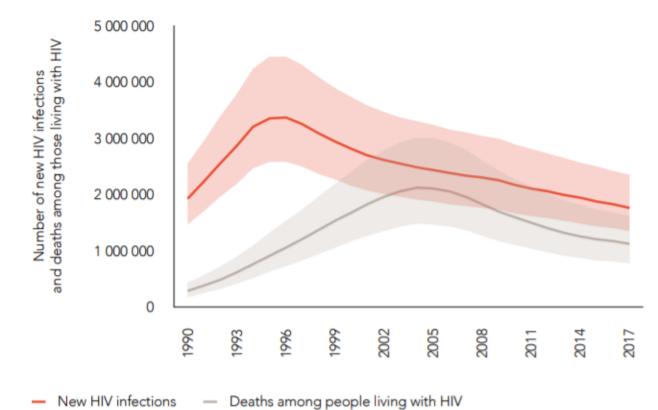
PROGRESS TO 90-90-90



Source: PEPFAR 2017 Annual Report to Congress

THE HEALTH BENEFITS OF ANTIRETROVIRAL THERAPY

- ART substantially improves health, well-being and quality of life for people living with HIV (PLHIV)
- PLHIV on ART can now have a near-normal life span
- ART has sharply lowered AIDSrelated mortality and morbidity



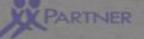
Source: UNAIDS 2018 estimates.

Katz IT 2017, Murray CJL 2014, Grinsztejn B 2014, TEMPRANO ANRS 12136 Study Group 2015, INSIGHT START Study Group 2015, Fidler S IAS 2018

PREVENTION BENEFITS OF ANTIRETROVIRAL THERAPY

- PARTNER and PARTNER 2 studies
 - One partner HIV positive and on ART
 - One partner HIV negative
- The PARTNER study (2010-14)
 - Couples in the study had sex more than 58,000 times without using condoms
 - Zero linked HIV transmissions from a positive partner on ART to their negative partner
- The PARTNER 2 study
 - Enrolled 972 HIV sero-discordant couples
 - No linked transmissions
 - Given rise to U = U (undetectable = untransmittable)

nderstanding the risk of / transmission when the partner is on therapy



Rodger A, et al. AIDS 2018. Abstract WEAX0104LB.

www.chip.dk/partner

U=U (B=B, I=I, K=K, N=N)

B=B (Turkish); I=I (Italian, Portuguese, Spanish); K=K (Vietnamese); N=N (Dutch)

 Undetectable = Untransmittable (U=U) conveys evidence-based message:

PLHIV who achieve undetectable viral load cannot transmit HIV

- Talk to your patients about U=U and the:
 - Necessity of staying undetectable for U=U to work
 - Importance of HIV treatment adherence to stay healthy & prevent transmission
 - When HIV is suppressed they will not transmit HIV to partners
 - Importance of knowing their viral load so they and their partners are sure of their undetectable status

UNDETECTABLE = UNTRANSMITTABLE



U=U (B=B, I=I, K=K, N=N)

B=B (Turkish); I=I (Italian, Portuguese, Spanish); K=K (Vietnamese); N=N (Dutch)

- U=U should be integrated into clinical practice as an essential component for increasing uptake of HIV services
- When PLHIV learn about U=U they are more likely to:
 - Get tested
 - Start and stay on HIV treatment
- Talk to your patients about U=U
 - Counsel on the necessity of staying undetectable for U=U to work
 - Educate them on the importance of taking HIV medications every day to stay healthy and prevent transmission



SECTION 2 MAXIMIZING THE HEALTH BENEFITS OF ART

WHEN TO START

Sources: Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy, July 2017. Geneva: World Health Organization; 2017.

Koenig SP, et al. Same-Day HIV Testing with Initiation of Antiretroviral Therapy versus Standard Care for Persons Living with HIV: a Randomized Open-Label Trial. PLoS Med. 2017;14(7):e1002357. Effect of Offering Same-Day ART vs Usual Health Facility Referral During Home-Based HIV Testing on Linkage to Care and Viral Suppression Among Adults with HIV in Lesotho: The CASCADE Randomized Clinical Trial, JAMA 2018;319:1103-1112

SAME-DAY TREATMENT INITIATION

WHO recommends:

- Rapid ART initiation should be offered to all people living with HIV
 - $\odot\,$ Rapid initiation is defined as within seven days from HIV diagnosis
- ART initiation should be offered on the same day to people who are ready to start
 - \circ Voluntary

Sources: Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy, July 2017. Geneva: World Health Organization; 2017.

Koenig SP, et al. Same-Day HIV Testing with Initiation of Antiretroviral Therapy versus Standard Care for Persons Living with HIV: a Randomized Open-Label Trial. PLoS Med. 2017;14(7):e1002357.

Effect of Offering Same-Day ART vs Usual Health Facility Referral During Home-Based HIV Testing on Linkage to Care and Viral Suppression Among Adults with HIV in Lesotho: The CASCADE Randomized Clinical Trial, JAMA 2018;319:1103-1112

WHAT TO START

WHAT TO START IN ADULTS AND ADOLESCENTS

Population	Preferred first-line regimen	Alternative first-line regimen	Special circumstances
	TDF + 3TC (or FTC) + DTG ^a	TDF + 3TC + EFV 400 mg ^b	TDF + 3TC (or FTC) + EFV 600 mg ^b AZT + 3TC + EFV 600 mg ^b TDF + 3TC (or FTC) + PI/r ^b TDF + 3TC (or FTC) + RAL TAF ^c + 3TC (or FTC) + DTG ABC + 3TC + DTG ^a
July 2019 Update			

Source Update of Recommendations on First- and Second-line Antiretroviral Regimens WHO July 2019



Note of Caution on the use of dolutegravir

Source Update of Recommendations on Firstand Second-line Antiretroviral Regimens WHO July 2019

- Effective contraception should be offered to women and adolescent girls of childbearing age or potential
- Dolutegravir can be prescribed
 - Women and adolescent girls of childbearing age or potential
 - Wish to become pregnant
 - **OR** who are not using consistent contraception
- If fully informed of the potential increase in the risk of neural tube defects at conception and until the end of the first trimester
- If women identify pregnancy after the first trimester
 - Dolutegravir should be initiated or continued for the duration of the pregnancy



Efavirenz 400mg

Source Update of Recommendations on Firstand Second-line Antiretroviral Regimens WHO July 2019

• Efavirenz 400 mg

- Recommended as an alternative 1st line drug
- Better tolerated than efavirenz 600 mg
- Safe in pregnancy
- Drug concentrations
 - Within the therapeutic range
 - Unlikely to result in reduced efficacy in pregnant women
- Efavirenz 400 mg
 - Co-administered with rifampicin containing anti-TB treatment
- Efavirenz-based ART
 - Should not be used
 - National estimates of pretreatment resistance to efavirenz are 10% or higher

SUMMARY OF SEQUENCING OPTIONS FOR FIRST AND SECOND ART REGIMENS FOR ADULTS AND ADOLESCENTS

First-line regimens	Second-line regimens	Alternative second line regimens
TDF + 3TC (or FTC) + DTG	AZT + 3TC + (ATV/r or LPV/r)	AZT + 3TC + DRV/r
TDF + 3TC (or FTC) + EFV	AZT + 3TC + DTG	AZT + 3TC + ATV/r (or LPV/r or DRV/r)
AZT + 3TC + EFV (or NVP)	TDF + 3TC (or FTC) + DTG	TDF + 3TC (or FTC) + ATV/r (or LPV/r or DRV/r)

Update

Source Update of Recommendations on First- and Second-line Antiretroviral Regimens WHO July 2019

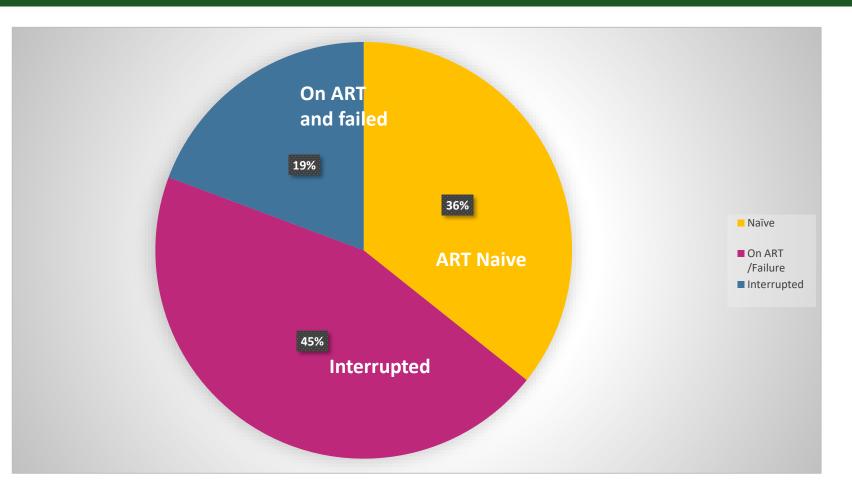
SECTION 3 RETENTION IN CARE AND TREATMENT ADHERENCE

Retention in ART Programs

- Major challenge in all settings and across populations
 - Pediatric and adolescent populations
 - Postpartum women
 - Men
- Poor patient retention undermines program and patient outcomes, including achieving sustained viral suppression
- WHO recommends that the mainstays of interventions to maximize retention in care are the provision of community-based support, including:
 - 1. Peer mobilization
 - 2. Adherence clubs
 - 3. Differentiated service delivery

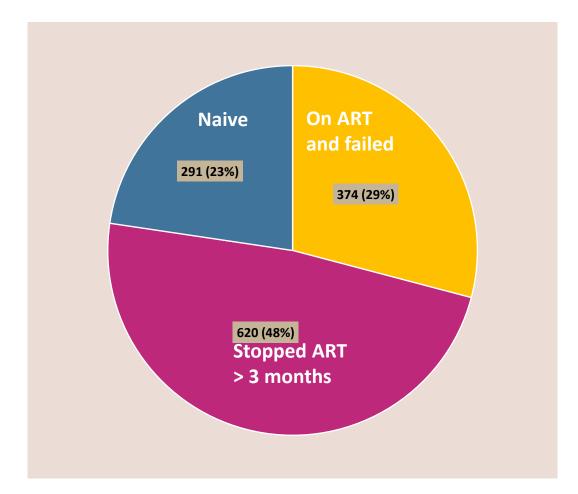
Source: Guidelines for managing advanced HIV disease and rapid initiation of antiretroviral therapy, July 2017. Geneva: World Health Organization; 2017.

HIV-RELATED ADMISSIONS INTO CAPE TOWN DISTRICT HOSPITAL (N=609)



Source: HIV-Related Medical Admissions to a South African District Hospital Remain Frequent Despite Effective Antiretroviral Therapy Scale-Up Meintjes, G. et al Medicine (Baltimore) 2015

LATE PRESENTERS AT 2 KINSHASA (DRC) HOSPITALS



Source: The Changing Face of Advanced HIV Disease Eric Goemaere, Maria Mashako AIDS2016 Durban South Africa 2016

PEER MOBILIZATION BY MARKET VENDORS IN THE LARGEST MARKET IN EAST AFRICA (ST. BALIKUDDEMBE MARKET)

danys ohits

KAMPALA, UGANDA

PEER MOBILIZATION

SERVICES ARE CONVENIENTLY TAKEN TO THE COMMUNITY THROUGH THIS COMMUNITY OUTREACH IN LESOTHO

FREE HIV TESTIN

FREE HIV TESTING

ADHERENCE CLUBS



- Groups meet <u>EITHER</u> at the health facility or in community
- Trained peers dispense drugs, measure weight, conduct symptom-based health assessments, and adherence counselling
- Once a year, nurse takes blood from everyone for viral load assessment
- People with problems go back to clinic for assessment
- In rural settings one group member will attend the clinic every 6 months to collect ARTs for everyone

ART adherence club report and toolkit Médecins Sans Frontières <u>https://www.msf.org.za/system/tdf/art_adherence-</u> <u>club_report_toolkit.pdf?file=1&type=node&id=3126&force=</u>

Differentiated Service Delivery

Package of Services DIFFERENTIATED CARE

- Less frequent (3, 6, 12 monthly) clinic visits
- Community ART pick-ups
- Multi-month ART refills (3 to 6 months supply)

 Instead of the traditional one month
- Fast track clinic visits

 \odot Skip the cues and just pick up drug and go



ART adherence club report and toolkit Médecins Sans Frontières <u>https://www.msf.org.za/system/tdf/art_adherence-</u> club_report_toolkit.pdf?file=1&type=node&id=3126&force=

Definition of a Stable Patient

On ART

No adverse drug reactions that require regular monitoring

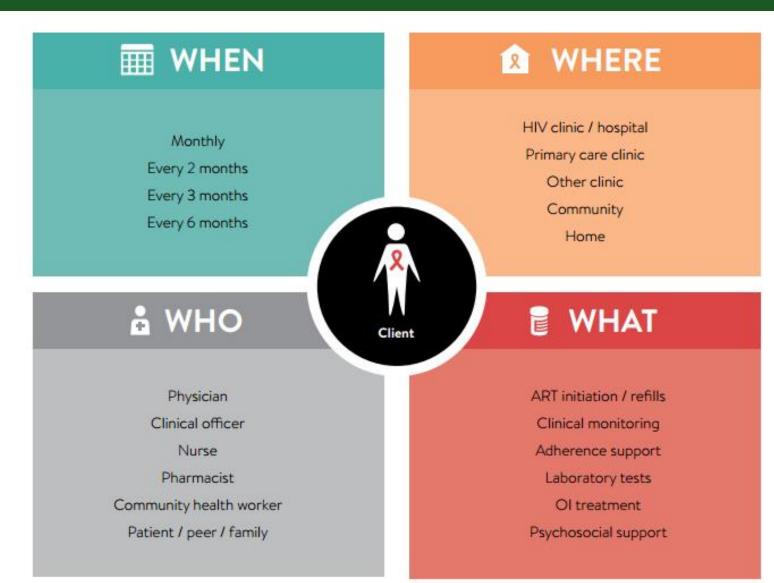
No current illnesses or pregnancy

Not currently breastfeeding

Good understanding of lifelong adherence

Evidence of treatment success (suppressed viral load or other markers)

Differentiated Care Framework



ADHERENCE



- Adherence support interventions should be provided to all people on ART
- Interventions demonstrated to improve adherence and viral suppression:
 - Peer counsellors
 - Mobile phone text messages
 - Reminder devices
 - Individual training (e.g., behavioral skills training, medication adherence training)
 - Fixed-dose combinations and once-daily regimens

STUDY

ADHERENCE CASE STUDY

- Mothers2mothers
 - Urban & rural communities in 8 southern & eastern Africa countries
- Developed an integrated service platform (ISP)
- Peer mentoring at both the health facility and community levels
- Combined with appointment-tracking and defaulter-tracing
- Support women to stay on treatment
 - During the first two years of her infant's life

Solving the adherence challenge in antiretroviral treatment amongst women in the Ngqushwa district, Eastern Cape, South Africa. A user-developed programme K. Pepper N. Sibutha-Nodada Abstract WEPEE700 AIDS 2018 Amsterdam

Using peer-to-peer psychosocial support and active client follow-up to improve adherence: Lessons learnt from the mothers2mothers program in Sth. Africa M. Mbule, C. Hofmeyr, J. Igumbor, K. Schmitz Abstract WEPEE701 AIDS 2018 Amsterdam

CASE STUDY

MENTOR MOTHERS

- Lay health-workers, referred to as Mentor Mothers (MMs)
- Work in facilities and communities
 - Deliver psychosocial support and education
 - Pregnant women and new mothers
- Mother Mentors:
 - Track ART pickups
 - Follow up with text messages, phone calls and home visits when an appointment is missed
- One-on-one interaction with a client
 - Provides adherence assessment
 - Tailored education
 - Support poor adherence identified



LESSON LEARNED

ISP model

- Evaluated in a multi-country, internal assessment in 2017
- Associated with high rates of adherence
- 94.5% had an average adherence rate of >95% (n=326) over multiple assessments
- Low levels of adherence associated with:
 - Lack of male partner support
 - Partner violence

SECTION 4 CONCLUSION

PEOPLE WITH ADVANCED DISEASE



- People with advanced disease are defined as
 - Presenting to care with a CD4 count below 200 (if known) or
 - WHO disease stages 3 & 4
- Package of care for these people should include the following:
 - Rapid initiation of ART
 - Systematic screening for cryptococcal disease
 - Using cryptococcal antigen
 - Active screening and appropriate prophylaxis for tuberculosis and toxoplasmosis
 - Intensive follow-up

Source: Guidelines for Managing Advanced HIV Disease and Rapid Initiation of Antiretroviral Therapy WHO July 2017

KEY POPULATIONS



- 40%-50% of all new HIV infections among adults worldwide occur among people from key populations and their immediate partners
- Key populations should have same access to ART as other populations
- Pregnant women from key populations should have the same access to PMTCT services as women in other populations
- Health services should be made available, accessible and adaptable to key populations based on the principles of:
 - Medical ethics
 - Avoidance of stigma and discrimination
 - Right to health

Source: Policy Brief: Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations, 2016 update. WHO 2017



REFLECTION POINTS

Let's reflect upon the content of this module

- When should ART be initiated?
- What ART should be initiated?
- What measures have been demonstrated to improve retention in care?
- What interventions have been demonstrated to improve ART adherence?
- How does differentiated care improve adherence and retention in care?
- What are two of the consequences of interruption of care and ART?
- What is the minimum package of services for people initiating ART with advanced HIV disease