

Advanced HIV Disease: Focus on Sub-**Saharan Africa**

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HIV LEARNING NETWORK The CQUIN Project for Differentiated Service Delivery



Non declared

Outline

- Introduction
- Advanced HIV Disease (AHD)
- Status of AHD
- Predisposition to and impact of AHD
- Management of AHD
- Comments on the collision of the HIV/AIDS and COVID-19 pandemics

Introduction

1996

Snapshot of the HIV/AIDS Epidemic: Where are we?

- cART introduced
- Protease inhibitors
- pVL measurement

- Start of AIDS Epidemic
- No specific treatment
- 个 Morbidity + Mortality
- Ols rampant

Ehole S, et al. AIDS Res Therapy; 2016;13:1; Ho D. NEJM 1995;333;450 El-Sadr et al. NEJM 2006;355:2283; Cohen M et al. NEJM 2011;365:493

1981

24.5/37.9 Mill PLH on ART-2019

- Guidelines promote treatment for all
- pVL monitoring emphasized

202C

- 90-90-90 targets-variably achieved
- HIV related mortality plateaus
- Non-AIDS conditions gain prominence
- Advanced HIV disease still prevalent

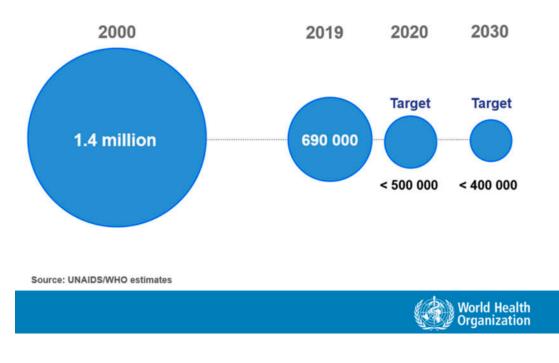
WHO Advanced HIV Disease (AHD)

• Definition-HIV+ve individuals presenting:

- CD <200 cells/mm³
- WHO stage 3 or 4 disease
- HIV in children aged <5 years
- AHD
 - Initial HIV diagnosis
 - ART experienced patients

Status of Advance HIV Disease

- Mortality due to HIV infection has fallen over the past decade, but this has plateaued
- It is estimated that >50% mortality is associated with AHD
- AHD is seen in >1/3rd of PLH presenting to care



Global number of HIV-related deaths

Calmy A, et al. CID, 2018;66(Suppl 2) S103; Lamp K et al. Plos One 2020;15:e2006987, WHO report 2020

Why do PLH Present with AHD

Pre-ART late presentation

- Weak health systems
 - Inadequate awareness and health education
 - No opportunities for testing
 - Poor linkage to care
 - Etc...

ART experienced patients

- Disengagement from care
- Poor adherence
- Emergence of resistance to ARV drugs

Major Opportunistic Infections associated with AHD in RLS

Tuberculosis

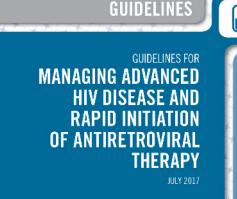
- Severe Bacterial Infections
- Cryptococcal Meningitis
- Pneumocystis jiroveci Pneumonia
- Toxoplasmosis

Gupta R. AIDS 2015; Ford N. J Int AIDS Soc 2016; Ford N, Lancet HIV. 2015; Hakim J. NEJM 2017.

ADH Management Protocols and Guideline

- WHO
- CQUIN
- Others
- Package of care
 - Screening, prophylaxis and pre-emptive treatment of major OIs
 - Rapid initiation of ART
 - Intensification of adherence support
- WHO July 2017: Guideline for managing Advanced HIV Disease and rapid initiation of ART
- ICAP approach to Differentiated Service Delivery

HIV TREATMEN



Screening: TB and Cryptococcal Disease

Areas for the package	Interventions	CD4 count	Adults and Adolescents	children
Screening & Diagnosis	Sputum Xpert as 1 st test TB diagnosis in symptomatic patients	Any	Yes	Yes
	Urine LF-LAM for TB diagnosis TB suspects	<100 cells/mm ³	Yes	Yes
	Crypto Antigen screening	< 100 cells/mm ³	Yes	No

Prophylaxis & Pre-emptive Treatment

Areas for the Package	Interventions	CD4 cell count	Adults and Adolescents	Children
Prophylaxis and Pre-emptive treatment	Co-trimoxazole prophylaxis	<350 cells/mm ³ WHO stage ¾ Settings with 个malaria & 个sepsis		
	TB preventive treatment	Any	Yes	Yes
	Flu pre-emptive treatment in CrAg+ve with no meningitis	<100 cells/mm ³	Yes	N/A
	Rapid ART initiation	Any	Yes	Yes

ART Initiation & Adherence Support

Areas for the Package	Interventions	CD4 cell count	Adults and Adolescents	Children
ART Initiation Adapted adherence support	Defer ART initiation if clinical S&S are suggestive of TB or Crypto meningitis	Any	Yes	Yes
	Tailored counselling to ensure optimal adherence-disease care package + home visits	<200 cells/mm ³	Yes	Yes

To Summarize: Management of AHD

- Screening for OIs
- Prophylaxis and pre-emptive therapy of OI
 - Cotrimoxazole
 - Fluconazole
 - Sepsis
 - Anthelminthic-albendazole
- Rapid initiation of ART and Adherence Support
 - Potent ART
 - Rapid Initiation
 - Treatment within 7days of diagnosis
 - Consider same-day treatment

Collision of the COVID-19 and HIV/AIDS Pandemics & the Future

• COVID-19

- COVID-19 is truly global
 - Full impact of the pandemic has not yet been reached especially in resource limited settings
- There is optimism regarding treatment interventions and preventive vaccine-but it is still early days
- Many questions and anxieties exist regarding scale-up of these interventions and how RLS will feature in the agenda

• What effect will it have on the HIV/AIDS response?

• HIV/AIDS though global continues to have its greatest impact in RLS-Resource allocation will in the face of the COVID-19 pandemic

Conclusions

- The success of the response to HIV/AIDS is indeed remarkable although it has come at a heavy human toll and it has taken 4 decades to realize
- AHD attenuates the success of ART especially in RLS where late presentation and OIs abound
- Guidelines and the package of care for the management of AHD is a strong foundation for the mitigation of mortality in PLH initiating ART or those who have disengaged from care
- COVID-19 is a factor which has impacted all aspects of the health sector globally and not least the response to the HIV/AIDS Epidemic

Additional References

- Burgos J, et al. Antiretroviral Therapy in Advanced HIV Disease: Which is the Best Regimen? AIDS Rev 2018;20:3-13
 - Review article-found no recommendations in guidelines
- Nathan F, et al. Managing Advanced HIV Disease in a Public Health Approach. CID 2018;66(Suppl 2):S106
 - WHO recommendations
- Prabu S, et al. Advanced HIV: diagnosis, treatment, and prevention. The Lancet HIV 2019;6:540
 - No new management advances from earlier recommendations
- Hu X, et al. HIV late presentation and advanced HIV disease among patients with newly diagnosed HIV/AIDS in Southwestern China: a large-scale cross-sectional study. AIDS Res Therapy 2019;16:1953

Chinese experience of AHD-45.1% of 45,118 patients presented with AHD

Acknowledgements

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